TEC

TEC Electronic Computing Scale

SL-9000-LSB SERIES

Owner's Manual
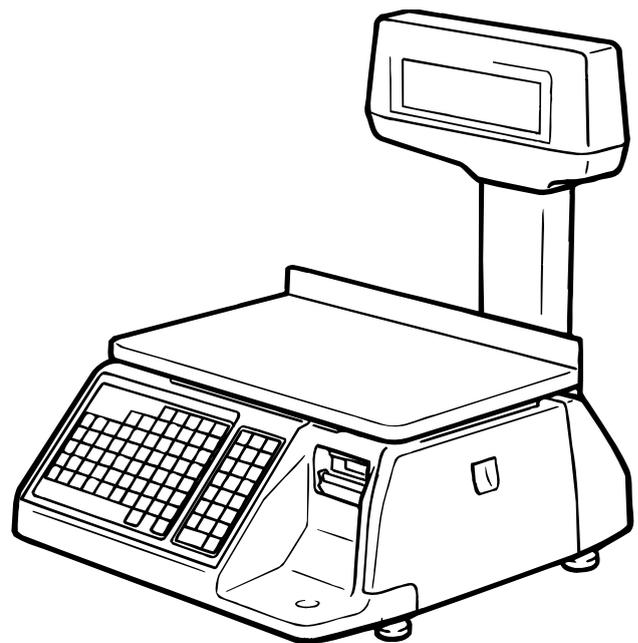
TOSHIBA TEC CORPORATION

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Safety Summary

Personal safety in handling or maintaining the equipment is extremely important. Warnings and Cautions necessary for safe handling are included in this manual. All warnings and cautions contained in this manual should be read and understood before handling or maintaining the equipment.
Do not attempt to effect repairs or modifications to this equipment. If a fault occurs that cannot be rectified using the procedures described in this manual, turn off the power, unplug the machine, then contact your authorized TOSHIBA TEC representative for assistance.

Meanings of Each Symbol

This symbol indicates warning items (including cautions).
Specific warning contents are drawn inside the △ symbol.
(The symbol on the left indicates a general caution.)

This symbol indicates prohibited actions (prohibited items).
Specific prohibited contents are drawn inside or near the ⊘ symbol.
(The symbol on the left indicates "no disassembling".)

This symbol indicates actions which must be performed.
Specific instructions are drawn inside or near the ● symbol.
(The symbol on the left indicates "disconnect the power cord plug from the outlet".)

⚠ WARNING

This indicates that there is the risk of **death** or **serious injury** if the machines are improperly handled contrary to this indication.

Any other than the specified AC voltage is prohibited. ■ Do not use voltages other than the voltage (AC) specified on the rating plate, as this may cause **fire** or **electric shock**.	**Prohibited** ■ Do not plug in or unplug the power cord plug with wet hands as this may cause **electric shock**.
Prohibited ■ If the machines share the same outlet with any other electrical appliances which consume large amounts of power, the voltage will fluctuate widely each time these appliances operate. Be sure to provide an exclusive outlet for the machine as this may cause the machines to **malfunction**.	**Prohibited** ■ Do not place metal objects or water-filled containers such as flower vases, flower pots or mugs, etc. on top of the machines. If metal objects or spilled liquid enter the machines, this may cause **fire** or **electric shock**.
Prohibited ■ Do not insert or drop metal, flammable or other foreign objects into the machines through the ventilation slits, as this may cause **fire** or **electric shock**.	**Prohibited** ■ Do not scratch, damage or modify the power cords. Also, do not place heavy objects on, pull on, or excessively bend the cords, as this may cause **fire** or **electrical shock**.
Disconnect the plug. ■ If the machines are dropped or their cabinets damaged, first turn off the power switches and disconnect the power cord plugs from the outlet, and then contact your authorized TOSHIBA TEC representative for assistance. Continued use of the machine in that condition may cause **fire** or **electric shock**.	**Disconnect the plug.** ■ Continued use of the machines in an abnormal condition such as when the machines are producing smoke or strange smells may cause **fire** or **electric shock**. In these cases, immediately turn off the power switches and disconnect the power cord plugs from the outlet. Then, contact your authorized TOSHIBA TEC representative for assistance.

Disconnect the plug.	■ If foreign objects (metal fragments, water, liquids) enter the machines, first turn off the power switches and disconnect the power cord plugs from the outlet, and then contact your authorized TOSHIBA TEC representative for assistance. Continued use of the machine in that condition may cause **fire** or **electric shock.**	**Disconnect the plug.**	■When unplugging the power cords, be sure to hold and pull on the plug portion. Pulling on the cord portion may cut or expose the internal wires and cause **fire** or **electric shock**.
Connect a grounding wire.	■ Ensure that the equipment is properly grounded. Extension cables should also be grounded. **Fire** or **electric shock** could occur on improperly grounded equipment.	**No disassembling.**	■Do not remove covers, repair or modify the machine by yourself. You may be **injured** by high voltage, very hot parts or sharp edges inside the machine.

⚠ **CAUTION** This indicates that there is the risk of personal **Injury** or **damage** to objects if the machines are improperly handled contrary to this indication.

Precautions

The following precautions will help to ensure that this machine will continue to function correctly.

- Try to avoid locations that have the following adverse conditions:
  - * Temperatures out of the specification
  - * Shared power source
  - * Direct sunlight
  - * Excessive vibration
  - * High humidity
  - * Dust/Gas
- Do not subject the machine to sudden shocks.
- Do not press the keys too hard. Keys will operate correctly if they are touched lightly.
- Clean the cover and keyboard, etc. by wiping with a dry cloth or a cloth soaked with detergent and wrung out thoroughly. Never use thinner or other volatile solvent for cleaning.
- To ensure that the scale is operating correctly, place a known weight on the platter and check it for correct weight measurement. This should be done every morning before starting normal operations.
- When moving the machine, take hold of the case and lift the machine. Never hold the remote unit.
- Do not place the machines on unstable or slanted surfaces, as they may drop or fall and cause **injury**.
- USE ONLY TOSHIBA TEC SPECIFIED paper.
- DO NOT STORE the paper or ribbons where they might be exposed to direct sunlight, high temperatures, high humidity, dust, or gas.
- Ensure the machine is operated on a level surface.
- Any data stored in the memory of the machine could be lost during a machine fault.
- Try to avoid using this equipment on the same power supply as high voltage equipment or equipment likely to cause mains interference.
- Unplug the machine whenever you are working inside it or cleaning it.
- Keep your work environment static free.
- Do not place heavy objects on top of the machines, as these items may become unbalanced and fall causing **injury**.
- Do not block the ventilation slits of the machines, as this will cause heat to build up inside the machines and may cause **fire**.
- Do not lean against the machine. It may fall on you and could cause **injury**.
- Care must be taken not to injure yourself with the printer paper cutter.
- Unplug the machine when it is not used for a long period of time.

Request Regarding Maintenance

- Utilize our maintenance services.
  After purchasing the machine, contact your authorized TOSHIBA TEC representative for assistance once a year to have the inside of the machine cleaned. Otherwise, dust will build up inside the machines and may cause a **fire** or a **malfunction**. Cleaning is particularly effective before humid rainy seasons.
- Our preventive maintenance service performs the periodic checks and other work required to maintain the quality and performance of the machines, preventing accidents beforehand.
  For details, please consult your authorized TOSHIBA TEC representative for assistance.
- Using insecticides and other chemicals
  Do not expose the machines to insecticides or other volatile solvents. This will cause the cabinet or other parts to deteriorate or cause the paint to peel.

1. INTRODUCTION

Thank you for purchasing the TEC SL-9000-LSB Series electronic computing scale. As you will discover, the TEC SL-9000-LSB series has many features and functions designed for user friendliness as well as complete customer satisfaction.

The 7-segment fluorescent display which indicates transaction information such as weights, unit prices, total prices, etc. and the liquid crystal display used to display commodity names and programming messages are provided with the scale. The 140 speed keys realize a higher degree of operability, and the 3 inch/sec. print speed ensures fast and clear printing.

Password security prevents unauthorized access to the PROG., M.DOWN, REWRAP, READ and RESET mode. The latest high speed in-line system, Local Operation Network (LON), allows easy system configuration and greater throughput.

Various options, including a TMCC interface, RS-232C interface, etc., are options available depending on your needs.

We believe that your needs will now be fully satisfied, and you will have total reliability in price calculations. Should you have any questions concerning the scale, please refer to this manual. Be sure to keep this manual for future reference.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operations of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.   (for USA only)

Changes or modifications not expressly approved by manufacturer for compliance could void the user's authority to operate the equipment.

"This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations."
"Cet appareil numéique de la classe A respecte toutes les exigences du Rèlement sur le matériel brouilleur du Canada."

(for CANADA only)

Some procedures described in this manual may be illegal in various state jurisdictions. When there are optional settings to enable various functions or to disable functions. Please ensure that the optional settings for scale operation meet the local requirements of weights and measures. If you are uncertain of specific items, contact the state or county office of weights and measures for clarification.

1.1 APPLICABLE MODEL

- SL-9000-30M-LSB-US
- SL-9000-15M-LSB-CA
- SL-9000-15M-LSB-QR
- SL-9000-15M-LSB-AU

The description of the model number is as follows.

S L - 9 0 0 0 - 3 0 M - L S B - U S

Max. Capacity

    30M: 30 lbs (decimal pound/multi-interval)

    15M: 15 Kg (multi-interval)

Destination Code

    ex.) US, CA, QR, AU etc.

Keyboard Type

    B: Built-in keyboard

Display Type

    LS: Liquid Crystal Display and 7 segment Display

1.2 ACCESSORIES

Owner's Manual (EM1-31071)	Remote Display	Speed Key Sheet	Quality Control Report (US type only)
Print Head Cleaner (24089500013)	Remote Blind Plate	Sealing Lead	Stranded Wire
Remote Display Sticker (QR Type only)	Remote Display Sheet (CA Type only)	Lead Plate (AU Type Only)	

NOTE: Check that there are no missing or incorrect parts in the accessories.

2. SPECIFICATION

2.1 SCALE

Item	US	CA	QR	AU
Maximum Capacity	30 lb	15 Kg (30 lb)	15 Kg	
Minimum Scale Division	0.005 lb (0~15 lb)	0.002 Kg (0 ~ 6 Kg)	0.002 Kg (0 ~ 6 Kg)	
		0.005 Kg (6 ~ 15 Kg)	0.005 Kg (6 ~ 15 Kg)	
	0.01 lb (15~30 lb)	0.005 lb (0 ~ 15 lb)		
		0.01 lb (15 ~ 30 lb)		
Maximum Tare	2.000 lb	1.000 Kg (2.205 lb)	1.000 Kg	
Display Range	0 ~ 30.05 lb	0 ~ 15.025 Kg (0 ~ 30.05 lb)	0 ~ 15.025 Kg)	
Unit Price Presettable	$0.01 ~ 99.99	$0.01 ~ 99.99	0 ~ 99999	$ 0.01 ~ 999.99
Minimum Price Display	$0.01	$0.01	1	$0.01
Power Requirement	AC 120 V ± 10%, 60 Hz (US/CA type)			
	AC 220 V ± 10%, 50/60 Hz (QR type)			
	AC 240 V + 10%, -15%, 50 Hz (AU type)			
Power Consumption	US/CA: 70 W, 1 A (Standby: 25 W, 0.4 A)			
	QR: 70 W, 0.66 A (Standby: 25 W, 0.3 A)			
	AU: 79 W, 0.5 A (Standby: 29 W, 0.2A)			
Temperature Limits	32°F ~ 104°F (0°C ~ 40°C)			
Relative Humidity	35% ~ 85% (No condensation)			
Message Display	Remote display: 18 digits 7 segments Fluorescent display			
	Liquid Crystal Display: 5x7 dots 16 characters 1 line LCD			
Weight	5 digits (US/CA type), 5 digits (QR/AU type)			
Unit Price	4 digits (US/CA type), 5 digits (QR/AU type)			
Total Price	5 digits (US/CA type), 6 digits (QR/AU type)			
Remote Display Mode	Dual sides			
Capacity of PLU Memory	560 PLUs (Standard), 240 PLUs when LOGO is available.			
	3120 PLUs max. (Option)			
Print Head	Thermal Print Head (2 inch wide)			
Media Issue Method	On-demand/Batch			
Dot Density	193 dots/inch (7.6 dots/mm)			
Print Speed	3 inch/sec. (76.2 mm/sec.)			
Available Printing Width	1.89 inch (48 mm), 2.24 inch (57 mm)			
Recommended Media				
Thermal Label	VHTS, VLTB (OSP)/Outer diameter: Ø93 mm (Max.)			
Variable Length Label	VHTS, VLTB (OSP)/Outer diameter: Ø90 mm (Max.)			
Thermal Receipt	120 FC (RICOH)/Outer diameter: Ø81 mm (Max.)			
Interface	CMT/PL-3 interface (Program Loader)			
	LON interface (RS-485)			
	PC-AT KEY interface (Option)			
	TMCC interface (Option)			
	RS-232C interface: 2 channel (Option)			
Dimensions (approx.)	17.2 inch (width)x16.8 inch (depth) x 18.7 inch (height)			
	436 mm (width)x426 mm (depth) x 474 mm (height)			
	(The height of the AU type is 554 mm.)			
Weight	33 lb (15 Kg)			

2.2 OPTION

Option Name		Model No. or Part No.	Description	Source
LON	LON Connector TM8P-88P	Part No. EAJ-0028001	A modular connector used to connect scales to each other in a LON configuration.	See Note 2
	LON Terminal Resistor 285D-8P	Part No. EAJ-0029001	A modular resistor attached to the scales connected at both ends of the LON configuration.	See Note 2
	LON Cable S-STLAN-2P (200 m/roll)	Part No. 10319100003	An 8-pin telephone cable used with the LON connectors attached to both ends of the cable. This cable connects scales to each other in a LON configuration.	See Note 2
TMCC	External Connector Box	OP-9000-IOEC-B	A junction box to which the TMCC kit is attached. It is also used with the RS-232 CL/CS kit.	See Note 1
	I/O PC Board	OP-9000-IOB	An I/O board equipped with the TMCC interface and an RS-232C interface (2 ch) ports. It is used to construct a TMCC and RS-232C systems.	See Note 1
	TMCC Cable Kit	OP-9000-IOCN-TMCC	A cable kit for the TMCC interface	See Note 1
RS-232C	RS-232CL Cable Kit	OP-9000-IOCN-232CL	Cable kit for the RS-232C interface including a D-sub 9-pin female PC connector.	See Note 1
	RS-232CS Cable Kit	OP-9000-IOCN-232CS	Cable kit for the RS-232C interface including a D-sub 9-pin male PC connector.	See Note 1
MEMO PC Board		OP-9000-PIGGYBACK OP-9000-PIGGYBACK-S/F	This board is used to expand the PLU memory to 4MB by installing the memory module.	See Note 1
Memory Module		OP-9000-RAM-512KB	DIP type PS-RAM to be installed on the MEMO PC board (OP-9000-PIGGYBACK) for memory expansion. When expanding the memory, install the two modules as one set.	See Note 1 and 3
		OP-9000-SRAM-512KB	DIP type S-RAM to be installed on the MEMO PC board (OP-9000-PIGGYBACK-S/F) for memory expansion. When expanding the memory, install the two modules as one set.	
Label Cassette		OP-9000-CASSETTE	In is covenient to change several kinds of labels.	See Note 1

NOTES: 1. Contact TOSHIBA TEC H.Q. or your nearest TOSHIBA TEC representative.
2. Order from TOSHIBA TEC Parts Center or purchase locally.
3. When purchasing memory modules locally, select one having the following specifications.
   ■ Maker: HITACHI Pseudo Static RAM (OP-9000-RAM-512KB)
     HITACHI Static RAM (OP-9000-SRAM-512KB)
   ■ Type: HM658512ALP-8V80ns, 600mil 32-pin Plastic DIP (DP-32) (OP-9000-RAM-512KB)
     HM628512ALP-770ns, 600mil 32-pin Plastic DIP (DP-32) (OP-9000-SRAM-512KB)

3. APPEARANCE

PC-AT Key Board I/F
(Option)

Main Power Switch

Drawer I/F
(Unused)

Remote Display

CMT/PL-3 I/F

LON I/F

Power Cord

Speed Keyboard and
Programming Keyboard

Operation Keyboard

Print Head

Level Gauge

Liquid Crystal Display

Meat Platter

Right Cover

Adjustable Legs

RS-232 I/F: FEMALE (Option)

RS-232 I/F: MALE (Option)
TMCC I/F: MALE (Option)

4. DISPLAY

4.1 US TYPE

- US (UNITED STATES)

TEC SL-9000

CAPACITY

WEIGHT	e=d
0 ~ 15 lb	0.005 lb
15 ~ 30 lb	0.01 lb

WEIGHT   lb   PRICE/lb $ TOTAL PRICE $

%/T NET   REG. M/D R/W   PREPACK   X Z LON INLINE ERROR

4.2 CA TYPE

Since the following two remote display sheets are enclosed with the CA machine, select one and affix it to the remote display. (Refer to Section 7 How to affix the remote display sheet.)

- CA (CANADA)

TEC SL-9000

CAPACITY
CAPACITÉ

WEIGHT	e=d	WEIGHT	e=d
0 ~ 16 Kg	0.002 Kg	0 ~ 15 lbs	0.005 lbs
6 ~ 15 Kg	0.005 Kg	15 ~ 30 lbs	0.01 lbs

WEIGHT/POIDS   PRICE/PRIX $ TOTAL $

ZERO/ %/T NET kg lb   REG. M/D R/W 100g PREPACK/   X Z LON INLINE ERROR/
ZERO   PRE-EMBALLE   ERREUR

- MX (MEXICO)

TEC SL-9000

WEIGHT	e=d	TARE
0 ~ 6 Kg	0.002 Kg	T=-1 Kg
6 ~ 15 Kg	0.005 Kg	

Max. 15 Kg
Min 0.04 Kg

PESO   kg   PRECIO UNITARIO $/kg   PRECIO TOTAL $

CERO NETO   REG. M/D R/W 100g FIJO   X Z LON LINEA ERROR

4.3 QR TYPE

WEIGHT	e=d	TARE	
0 ~ 6 Kg	0.002 Kg	T=-1 Kg	Max. 15 Kg
6 ~ 15 Kg	0.005 Kg		Min 0.04 Kg

TEC SL-9000

Ⓐ
Ⓑ

For the QR machine, the following multi-linqual display stickers are provided to adapt machines to use in various countries. Select one of them and affix it to positions Ⓐ and Ⓑ on the remote display. (Refer to Section 7 How to affix the remote display sheet.)

- AG/CL (ARGENTINA/CHILE)

| PESO	kg	PRECIO UNITARIO $/kg	PRECIO TOTAL $	—— Affix to position Ⓐ
CERO NETO		REG. M/D R/W 100g FIJO X Z LON LINEA ERROR		—— Affix to position Ⓑ

- BN/SG (BRUNEI/SINGAPORE)

WEIGHT	kg	UNIT PRICE $/kg	TOTAL PRICE $	Ⓐ
ZERO NET		REG. M/D R/W 100g FIX X Z LON INLINE ERROR		Ⓑ

- IN (INDONESIA)

WEIGHT	kg	UNIT PRICE Rp/kg	TOTAL PRICE Rp	Ⓐ
ZERO NET		REG. M/D R/W 100g FIX X Z LON INLINE ERROR		Ⓑ

- MY (MALAYSIA)

WEIGHT	kg	UNIT PRICE RM/kg	TOTAL PRICE RM	Ⓐ
ZERO NET		REG. M/D R/W 100g FIX X Z LON INLINE ERROR		Ⓑ

- PH (PHILIPPINES)

WEIGHT	kg	UNIT PRICE PHP/kg	TOTAL PRICE PHP	Ⓐ
ZERO NET		REG. M/D R/W 100g FIX X Z LON INLINE ERROR		Ⓑ

- SD (SAUDI ARABIA)

WEIGHT	kg	UNIT PRICE S.R./kg	TOTAL PRICE S.R.	Ⓐ
ZERO NET		REG. M/D R/W 100g FIX X Z LON INLINE ERROR		Ⓑ

- TH (THAILAND)

WEIGHT	kg	UNIT PRICE BT/kg	TOTAL PRICE BT	Ⓐ
ZERO NET		REG. M/D R/W 100g FIX X Z LON INLINE ERROR		Ⓑ

- ZA (SOUTH AFRICA)

WEIGHT	kg	UNIT PRICE R/kg	TOTAL PRICE R	Ⓐ
ZERO NET		REG. M/D R/W 100g FIX X Z LON INLINE ERROR		Ⓑ

4.4 AU TYPE

TEC SL-9000

WEIGHT	e=d	TARE
0 ~ 6 Kg	0.002 Kg	T=-1 Kg
6 ~ 15 Kg	0.005 Kg	

Max. 15 Kg
Min 0.04 Kg

WEIGHT   kg   UNIT PRICE   \$/kg   TOTAL PRICE   \$

CERO   NET   REG. M/D R/W   100g   FIX   X   Z   LON   INLINE   ERROR

5. KEY LAYOUT

5.1 PROGRAMMING KEYBOARD

					CLEAR	SHIFT	SET NEXT	NEXT PLU	AUTO CODE
			SEND	RECEIVE	↑	↓	CHANGE PLU	DELETE PLU	RETURN 1/4
PROG.	◇	ENTER	-	TEST	←	→	DELETE 1/2 (A)	INSERT 1	DELETE (B)
! 1	" 2	# 3	$ 4	% 5	& 6	´ 7	` 8	? 9	@ 0
* Q	+ W	(E	) R	/ T	: Y	; U	< I	= O	> P
[A	\ S	] D	^ F	- G	{ H	¦ J	} K	~ L	☒ -
È Z	É X	Â C	Ê V	→ B	← N	↓ M	↑ SPACE	▼ ,	^ .
							ZERO		FEED
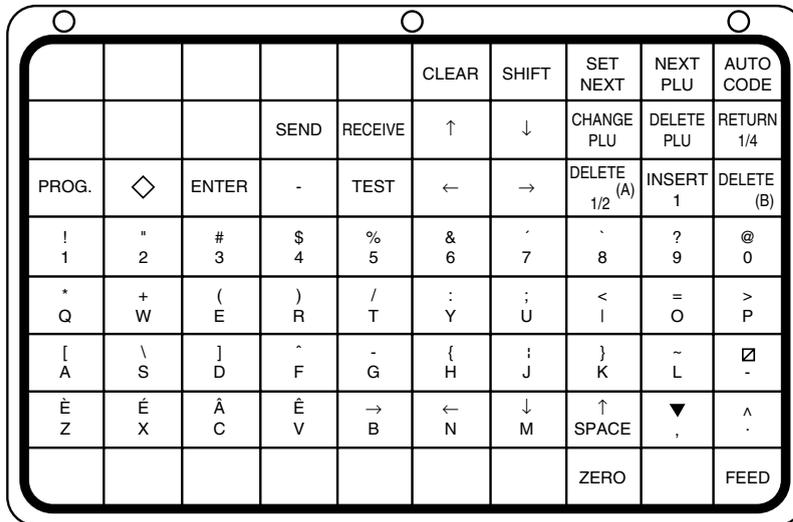
NOTE: *Blank keys have no function.*

■ Programming Keyboard Function

Name of Key	Function
CLEAR	1. Clears preceding numeric data. 2. Releases the scale from the error mode.
SHIFT	Toggles between the upper characters or lower characters.
SET NEXT	Calls the next PLU data item. Sets the media transarency on the sensor.
NEXT PLU	1. Calls the next PLU #. 2. Selects a programming item.
AUTO CODE	Sets "AUTO CODE."
CHANGE PLU	Changes the PLU # currently called.
DELETE PLU	Deletes PLU.
TEST	Prints data set in the currently called PLU.
ENTER	Inputs data to the SL-9000 system during programming.

Name of Key	Function
_	1. Displays the preceding PLU data. 2. Used to set an auto code. 3. Calls the preceding label format # when setting the print position. 4. Selects a prgramming item.
←	Moves the cursor to the left.
→	Moves the cursor to the right.
DELETE (A) 1/2	1. Deletes a selected character when setting commodity names. 2. Sets a unit price per 1/2 lb.
INSERT 1	1. Inserts a space when setting a commodity name. 2. Toggles between 100 g and Kg, or used to select Lb when setting unit price.
DELETE (B)	Deletes all characters on the selected line when setting commodity names.
RETURN 1/4	1. Displays the next line when setting the ingredient. 2. Sets a unit price per 1/4 lb.
↑ SPACE	Inserts a blank space in descriptors.
SEND	Stores "Ingredient data" in the temporaty memory.
RECEIVE	Calls "ingredient data" from the temporaty memory.
↑	Sets the preceding item when setting PLU and nutrition information.
↓	Sets the following item when setting PLU and nutrition information.
PROG.	Returns to the programming menu.
◇	1. Selects programming menu group. 2. Toggles between capitals and small letters. 3. Sorts the file when setting PLU data, ingredient data and nutrition data. 4. Sets a block PLU # using the confirmation label procedure. 5. Toggles between the scrolling message and fixed message. 6. Calls the second half of the speed keys and sets a department #. 7. Toggles between In-line and Local or in-line and off-line of LON system.
Other Keys	The other 39 keys are used to set the character.
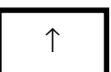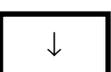
5.2 OPERATION KEYBOARD AND SPEED KEY BOARD

① Primary function
② Secondary function

	US type	CA, QR, AU type
①	1/2	100 g
②	1/4	LB/kg

1	2	3	4	5	6	7	8	9	①
10	11	12	13	14	15	16	17	18	②
19	20	21	22	23	24	25	26	27	PRESET COUNT
28	29	30	32	32	33	34	35	36	GRADE LINE
37	38	39	40	41	42	43	44	45	LOGO
46	47	48	49	50	51	52	53	54	GROUP#
55	56	57	58	59	60	61	62	63	ST
64	65	66	67	68	④ 69	③ 70	ZERO	TEST	FEED

ESC.	PROG.	POWER
NEXT PLU	VOID	◇
SAVE	FOR	DT/TM
7	8	9
4	5	6
1	2	3
0	T	C
PLU		PRT/*
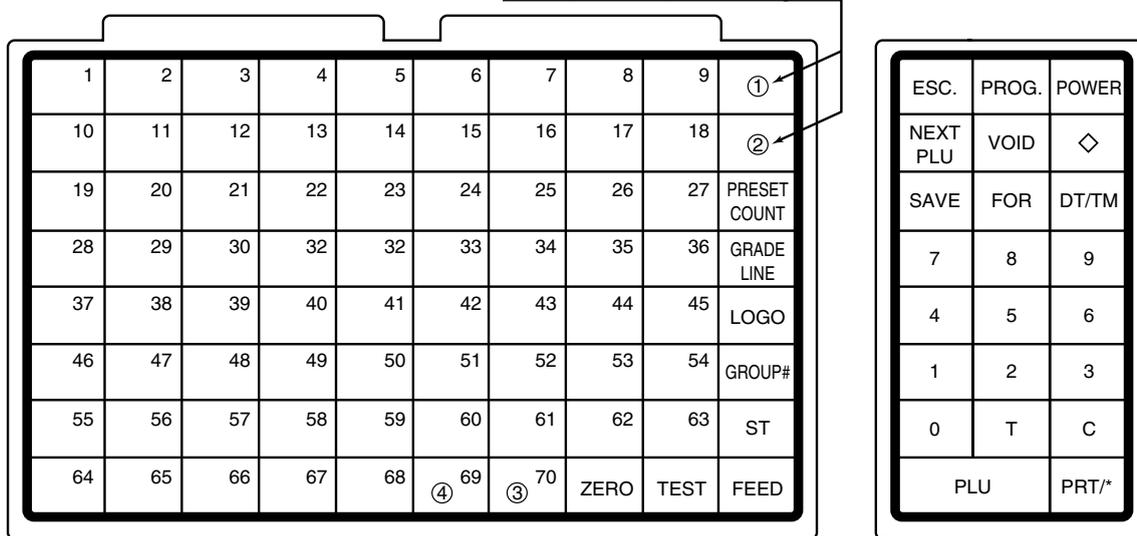
NOTE:
1. The numbers 1~70 indicate the speed key layout, but the actual keys have no number. Pressing the ◇ key enables another 70 PLUs assignment.
2. The functions of the ③ and ④ keys can be changed according to the initial settings as follows.

Initial Setting #		Speed key #	
8-7	12-8	69 (④)	70 (③)
0	0	Speed key #69	Speed key #70
0	1	Speed key #69	AUTO/MANUAL key
1	0	Speed key #69	Tare % key
1	1	AUTO/MANUAL key	Tare % key

3. The 100g key (①) has no function on the AU type.
4. The LB/kg key (②) has no function on the QR and AU types.

■ Operation Keyboard Function

Name of Key	Function
0 to 9	Enters numeric data such as PLU #, unit price and tare.
C	1. Clears numeric entries. 2. Releases the scale from error mode. 3. Releases the scale from SAVE mode.
T	Subtracts tare.

■ Operation Keyboard Function

Name of Key	Function
PLU	Calls a PLU or clears displayed PLU.
PRT/*	Prints the customer label.
SAVE	Saves tare and unit price after taking off the commodity from a platter.
FOR	Sets the quantity of commodity in "BY COUNT" mode.
DT/TM	Displays the date.
NEXT PLU	1. Selects the item for change Print/OFF. 2. Selects a programming item and a main menu.
VOID	1. Cancels preceding data. 2. Selects a programming item and a main menu.
◇	1. Enables calling the other 70 speed keys. 2. Selects the function for change Print/OFF. 3. Selects a menu group.
ESC.	Returns to the main menu.
PROG.	Accesses print item, auto message timer, print format and issue mode selection mode.
POWER	Turns the display on/off when the scale power is on.
1/2 1/4	Changes between 1/2 lb and 1/4 lb (US type only).
100g	Changes the unit of measure to 100g (CA/QR type only).
LB/kg	Changes the unit of measure between lb and kg (CA type only).
PRESET COUNT	Sets the number of labels to print.
GRADE LINE	Prints a grade line.
LOGO	Calls a logo.
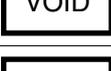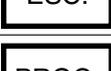
Name of Key	Function
GROUP #	No function
ST	No function
%	This key is used for item or subtotal discount by entering a percentage. (Optional key by initial setting)
FEED	Feeds the label.
TEST	Issues a test label.
ZERO	Adjusts the zero point.
AUTO/ MANUAL	Changes the label issue mode between Automatic issue and manual issue. (Optional key by initial setting)
1 to 70	Calls the PLU frequently used.
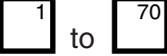
6. PROCEDURE BEFORE OPERATION

1.   Unpack the accessories and scale from the carton.
2.   Install the remote display on the scale. (See Page 7-1.)
3.   Refer to Safety Precautions in this manual and set up the scale in a proper location.
4.   Load the label or receipt. (See Page 9-1.)
5.   Be sure to insert the power cord plug into an AC outlet.
6.   Adjust the level gauge. (See page 8-1.)
7.   Connect a PC-AT keyboard if necessary.
8.   Turn the power on and then press the power key. (See page10-1.)
9.   Set the following program menus:

Menu Group	ITEM No.	Programming Name
2	0	PRINT FORMAT
2	1	DATE/TIME SETTING
1	1	PLU DATA SETTING

If necessary, set the following program menus:

Menu Group	ITEM No.	Programming Name
1	2	INGREDIENT MESSAGE
1	3	NUTRITION SETTING
1	5	ADDRESS SETTING
1	7	SPECIAL INFORMATION
1	8	GRADE LINE
1	9	SPEED KEY SET

10. Call a PLU to be sold in weighing mode, and place a weight on the platter to check a correct price is displayed.
11. The scale is ready to issue labels.

7. INSTALLATION PROCEDURE

■ Remote Display

WARNING!
Be sure to cover the connectors with the connector cover because of high voltage and current. If the connectors are exposed to water, a leakage may result.

CAUTION: Never place the scale upside down. Doing so will cause a malfusction.

1. To install the remote display, insert the two screws on the bottom of the remote pipe into the holes provided on the scale base.
2. Connect the connectors, pull down the connector cover, and install the remote blind plate. Then tighten the screws to secure the remote display.
3. Remove the tape from the remote packing and remote cap and lower to fit them to the scale.
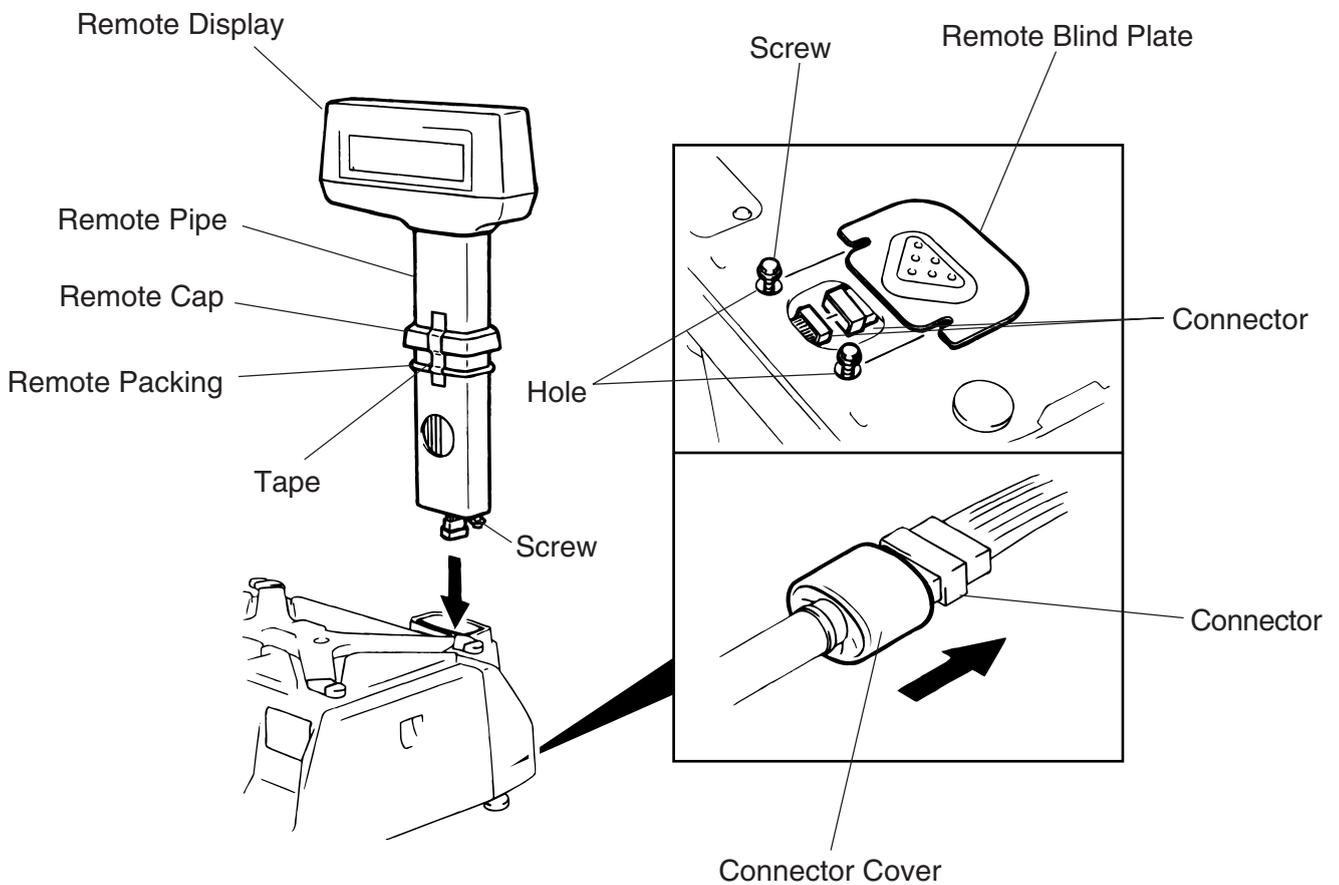
4. For the CA type, affix the remote display sheets to the remote display.
    For QR type, affix the remote display sticker to the blank remote display sheet which is pre-installed on the scale. Be sure to wipe the remote display surface clean before affixing the sheet or sticker.

● CA Type

Remote Display

Affix here.

Remote Display Sheet
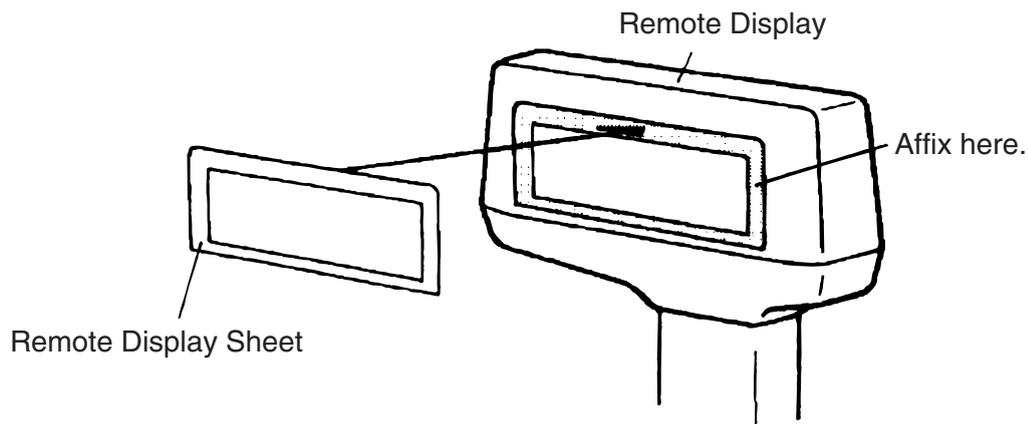
Affix the remote display sheets to the depressed area of the remote display on both sides.
(Operator side and customer side)

● QR Type

Remote Display

Affix to position Ⓐ

Affix to position Ⓑ

Remote Display Sticker
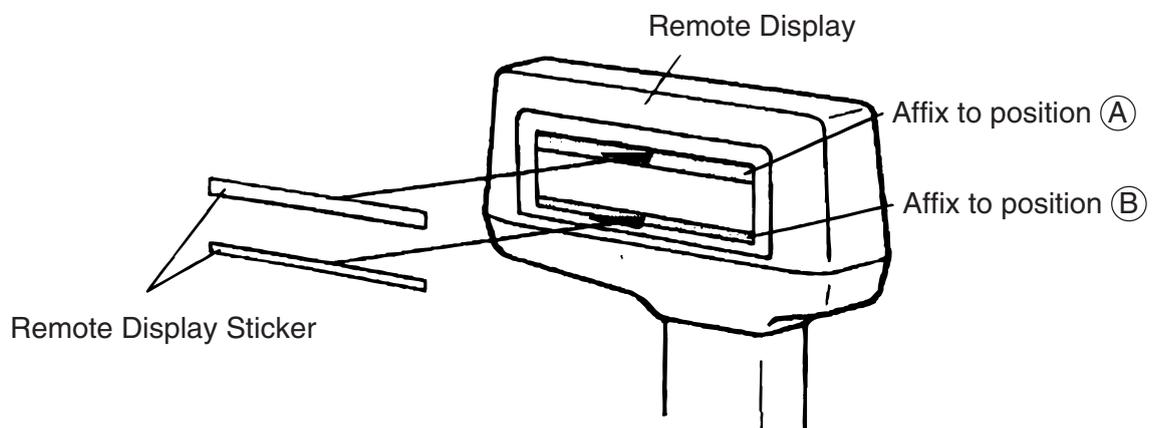
Affix the remote display stickers to the inner edge of the remote display sheet. (The sticker should be affixed on both the operator side and customer side)

8. LEVEL ADJUSTMENT

1. Level Gauge

    Set the scale on a stable and level surface. Level the scale by turning the adjustable legs so that the air bubble is inside the center circle.
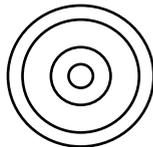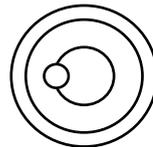
Correct   Incorrect

2. Adjustment Procedure

    ① When the air bubble moves toward the left side, turn the right adjustable legs clockwise.
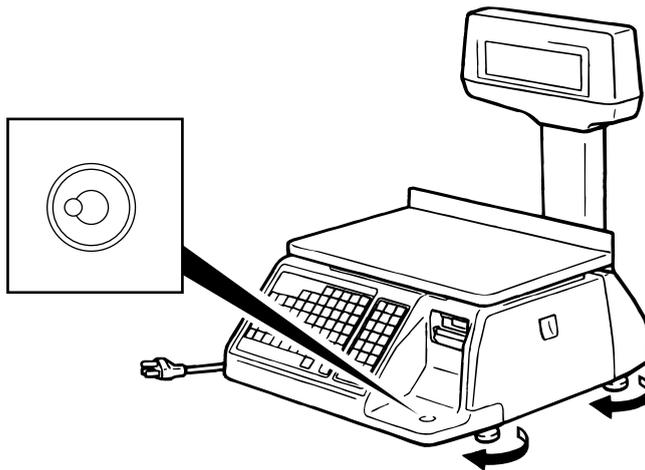
    ② When the air bubble moves toward rear, turn the front adjustable legs clockwise.
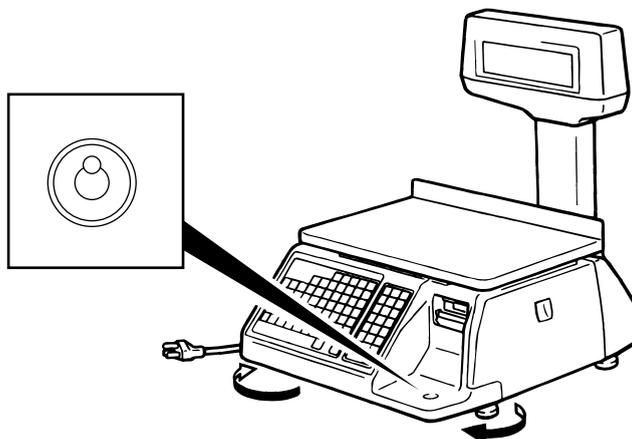
9. REMOVAL AND REPLACEMENT OF MEDIA

WARNING!
Since there is a cutter at the paper outlet, be careful not to injure your fingers when replacing media.

CAUTION:	Do not hold the label cassette by the portion A. Doing so may deform the label cassette, causing damage when setting it in position. Please be sure to hold the label cassette as the following figure shows.
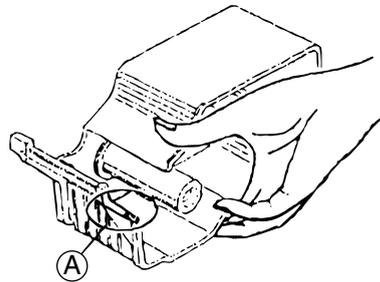
1. Open the right cover. Then push the head-up lever in the direction indicated by the arrow.

Head-up Lever
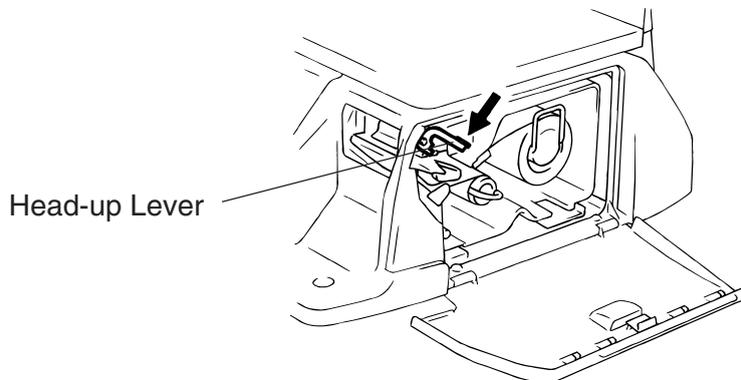
2. Pull out the label cassette.
3. Pull out the roll stopper and the backing paper stopper, and remove the media core with backing paper.

Label Cassette

Roll Stopper

Backing Paper Stopper
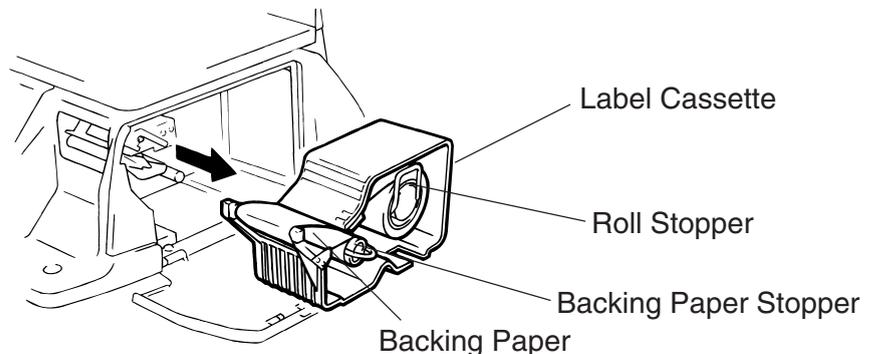
Backing Paper

NOTE:	*When removing the backing paper, loosen the paper by turning the paper winding shaft counterclockwise.*

4. Loosen the P-2.6x6 screw and move the label guide plate according to the media width.

5. Secure the label guide plate with the P-2.6x6 screw.

Screw (P-2.6x6)

48-mm label dowel

Label Guide Plate

57-mm label dowel
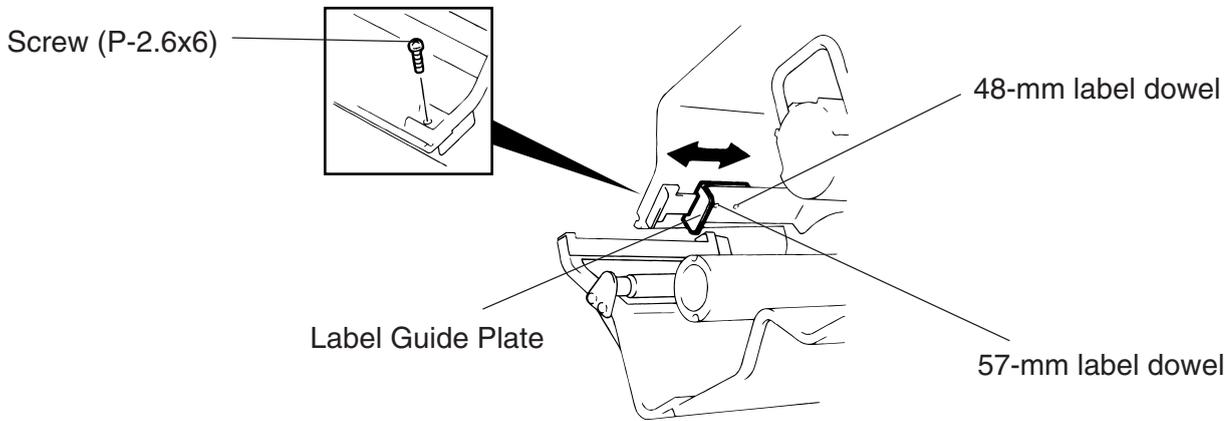
NOTE: *Ensure that the label guide plate aligns with the dowel.*

6. Refer to the figure below and set the media on the label cassette.

7. Insert the roll stopper into the media core fully.

8. Set the backing paper stopper in the proper orientation.

Label or Report Paper   Roll Stopper

Roll Stopper

Label

Backing Paper Stopper
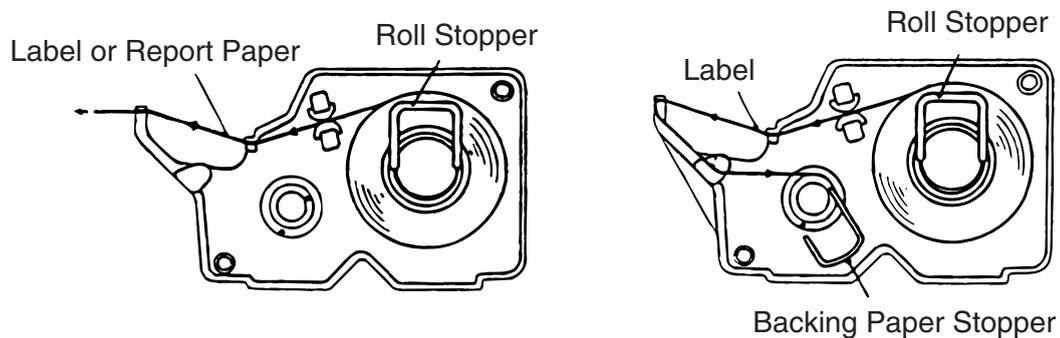
9. Assemble the label cassette to the scale and remove slack of the media.
Push down the print head, and close the right cover.
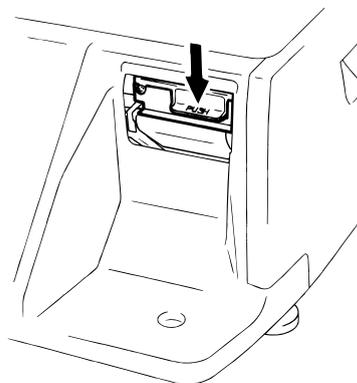
NOTE: *After replacing the media, press the feed key to confirm that the media is issued correctly.*

*Use of other model's label cassette in the SL-9000 may cause a label skew.

10. OUTLINE OF OPERATION

WARNING!
Since there is a cutter at the paper outlet, be careful not to injure your fingers when issuing labels.
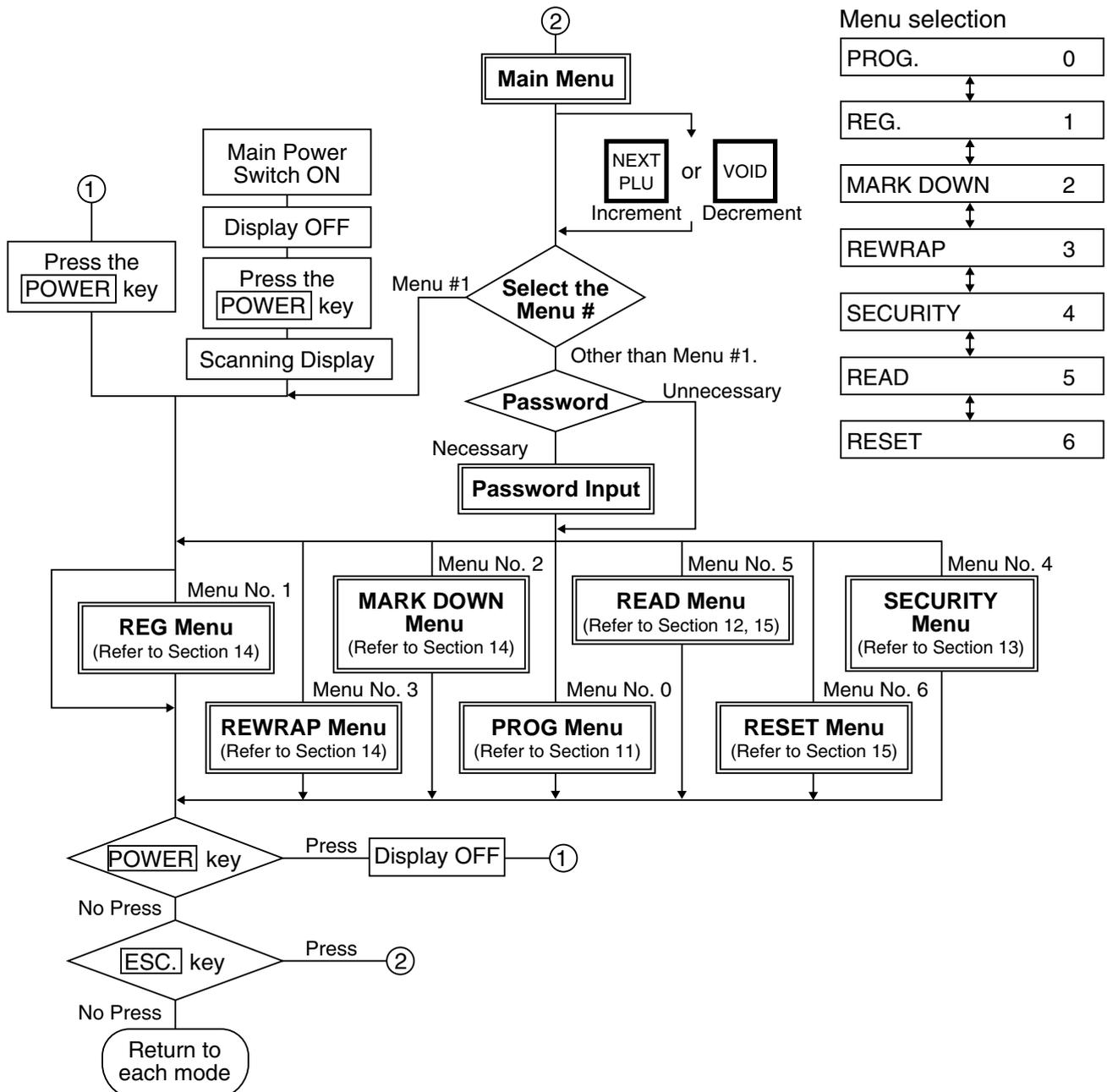
NOTES:

1. *You can register a password to prohibit unauthorized access to each menu expect for REG. menu.*

2. *To avoid wasteful use of the display, press the POWER key to turn the display off while being unused. Pressing the POWER key again allows you to enter REG. mode without scanning.*

3. *Refer to respective sections for explanation each menu enclosed by a double rectangle.*

11. PROGRAMMING PROCEDURES

■ How to access the Programming Menu

Item # selection

Increment   Decrement

| NEXT PLU | or | VOID |

ENTER

Select the programming menu group.

Select an item No. (See next page.)

| ESC. | 0 | Password | unnecessary / neccesary | Enter the Password | ◇ | 0 ~ 9 |

| Programming starts | Programming completes | PROG. |
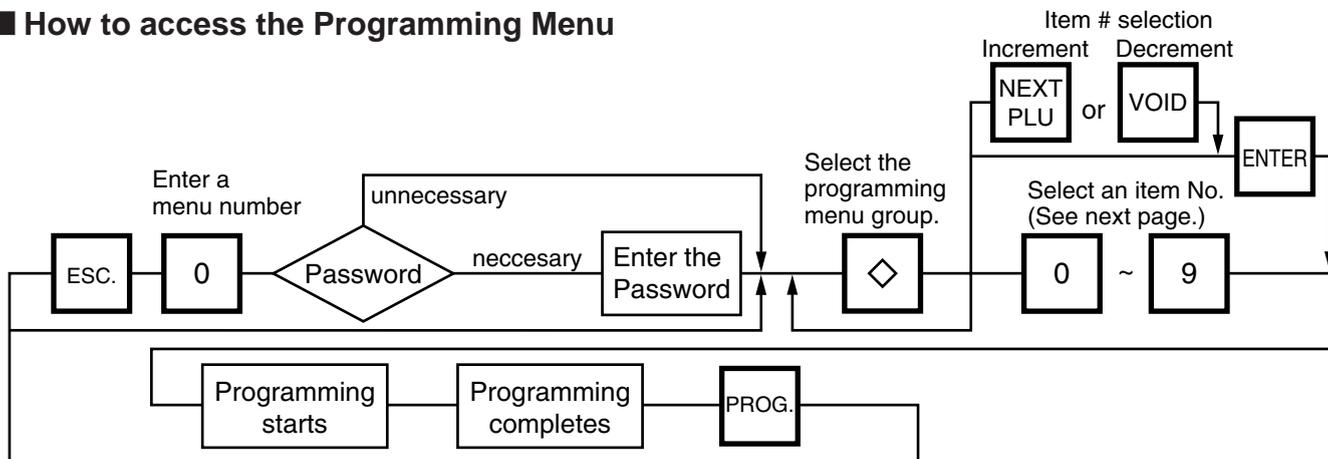
NOTES: 1. When the selected menu (0) is protected from an access, refer to Section 13.2 and enter the password.
2. In Sections 11.1, 11.2 and 11.3, items which have been sold on that day cannot be called unless they are reset or the Initial Setting #1-4 is set to 1.

■ How to Select Menu and Item No.

Item No.

< Menu Group 1 >

| PLU DATA EDIT | 0 | @ | Liquid Crystal Display |

TITLE

| NEXT PLU | VOID | or | 0 ~ 9 |

◇

<Item No.>

PLU DATA EIDT	0	ADRESS	5
PLU DATA	1	SPECIAL INFO.	7
INGREDIENT	2	GRADE LINE	8
NUTRITION	3	SPEED KEY SET	9
CONF. LABEL	4		

< Menu Group 2 >

| PRT LOCATION | 0 |

| NEXT PLU | VOID | or | 0 ~ 9 |

◇

<Item No.>

PRT LOCATION	0	INITIAL SET	5
DATE TIME	1	BAR CODE FORM.	6
CMT	2	TITLE	7
ON-LINE/LOCAL	3	LOGO	8
LON SYSTEM	4	IDIOM	9

< Menu Group 3 >

| VENDOR | 0 |

| NEXT PLU | VOID | or | 0 1 |

◇

<Item No.>

VENDOR NAME	0
FREE FORMAT	1

■ Table 1:   Title and Contents of Programming Menu

NO.	TITLE	MENU GROUP	ITEM No.	CONTENTS	Page
1	PLU DATA EDIT	1	0	CHANGE UNIT PRICE	11-4
2	PLU DATA	1	1	PROGRAM/CHANGE/DELETE PLU	11-5
3	INGREDIENT MESSAGE	1	2	PROGRAM/CHANGE INGREDIENT	11-7
4	NUTRITION FACTS	1	3	PROGRAM/CHANGE NUTRITION FACTS TABLE	11-8
5	CONFIRMATION LABEL	1	4	VERIFY THE PROGRAMMING DATA OF PLU	11-12
6	ADDRESS SETTING	1	5	PROGRAM ADDRESS	11-13
7	SPECIAL INFO.	1	7	PROGRAM SPECIAL INFORMATION	11-14
8	GRADE LINE	1	8	PROGRAM GRADE LINE	11-14
9	SPEED KEY SETTING	1	9	ASSIGN COMMON PLU TO SPECIFIC SPEED KEY	11-15
10	PRT LOCATION	2	0	SELECT LABEL FORMAT AND ADJUST	11-16
11	DATE/TIME SETTING	2	1	PROGRAM DATE/TIME/MACHINE #/STORE CODE	11-18
12	CMT/PL-3	2	2	BACK-UP /LOAD DATA OF PLU/ING/NUTRI./SPEED KEY	11-18
13	IN-LINE/LOCAL	2	3	SET PARAMETERS FOR TMCC	11-21
14	LON SYSTEM	2	4	SET PARAMETERS FOR LON	11-22
15	INITIAL SET	2	5	SET INITIAL PARAMETERS	-
16	BAR CODE FORMAT	2	6	PROGRAM BARCODE FORMAT	11-24
17	TITLE	2	7	PROGRAM/CHANGE TITLE ON DISPLAY/PRINT	11-26
18	LOGO	2	8	SEND/RECIEVE LOGO DATA	11-27
19	IDIOM	2	9	PROGRAM IDIOM	11-28
20	VENDOR	3	0	VENDOR NAME	11-28
21	FREE FORMAT	3	1	PROGRAM FREE FORMAT	11-29

NOTE: *Menu No. 15 is program for use of dealers. Connect a TOSHIBA TEC representative if you desire to use them. When you enter one of these menus by mistake, press* ESC. *key to return to Main Menu.*

■ How to enter characters

Use the following procedure to enter a commodity name, address and ingredient message.

Example)　　1st line:　TEC STORE
　　　　　　　2nd line　(TEL) 0123-45-6789

| T | E | C | — | SPACE | — | S | T | O | R | E | — | RETURN 1/4 |

1st line content

| SHIFT | — | (| — | SHIFT | — | T | E | E | — | ← | — | DELETE (A) 1/2 | L | - | 6 | 7 | 8 | 9 |

2nd line content
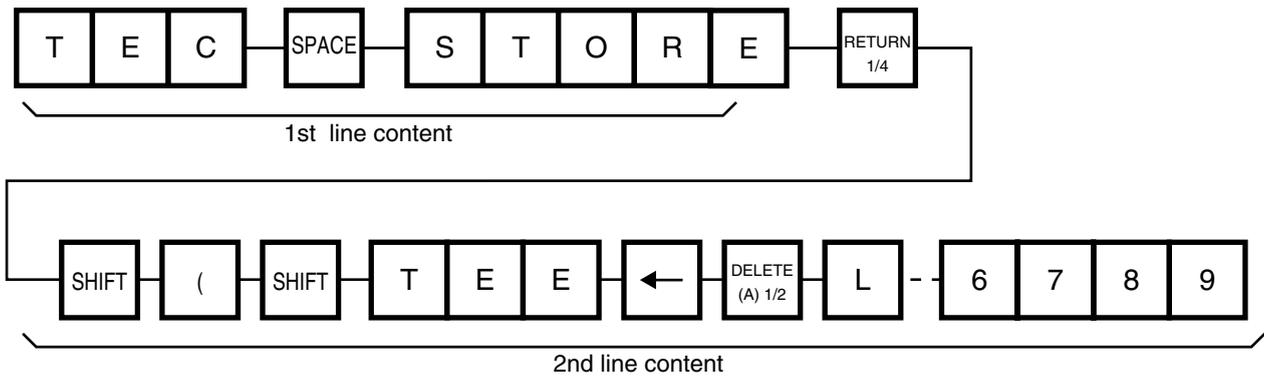
NOTES:　1.　← and → keys are the cursor keys.

2.　To insert a space, move the cursor to the next character to the space to be inserted, and press INSERT key.

3.　To delete a line, press DELETE (B) key.

4.　To move the cursor to the preceding line, press - key, or ↑ key when entering a commodity name.

5.　Pressing the ◇ key toggles between capitals and small letters.

6.　When entering a commodity name, press ENTER or ↓ key instead of the RETURN 1/4 key to return.

7.　Pressing the CHANGE PLU key toggles the type font between normal and boldface.

8.　To call a preset ingredient message idiom, follow the procedure below:

| NEXT PLU | — | Enter the idiom #. | — | RETURN 1/4 |
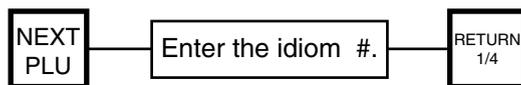
9.　To skip a line when entering an ingredient message, follow the procedure below:

| SET NEXT | — | Enter the line #. | — | RETURN 1/4 |
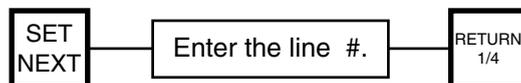
11.1 UNIT PRICE CHANGE

Menu Group: 1
Item No.: 0

Unit prices stored in PLU can be changed under this menu.
In this procedure, use the operation keys (except when calling a PLU by using a speed key).
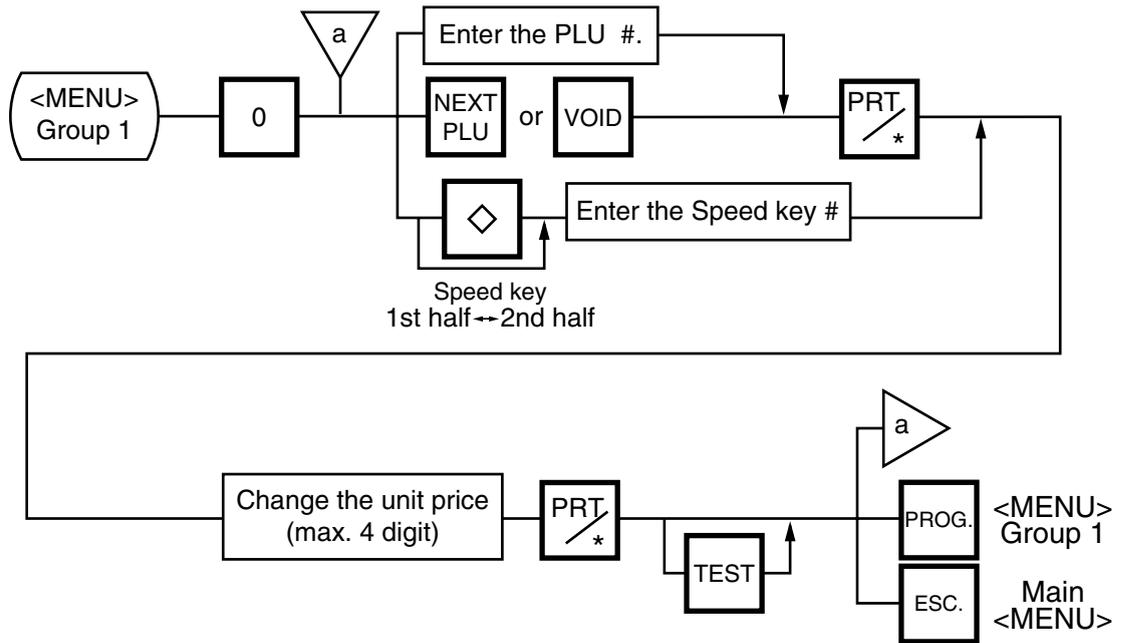
NOTES: 1. Calling a PLU# that has not been stored in the PLU file results in an error.

2. Under this Menu (Menu No. 0), "open-price" PLU's price cannot be changed.

11.2 PLU DATA SETTING

Menu Group: 1
Item No.:   1

Setting or changing the contents of PLU (PLU#, UPC#, Commodity Name, etc.).
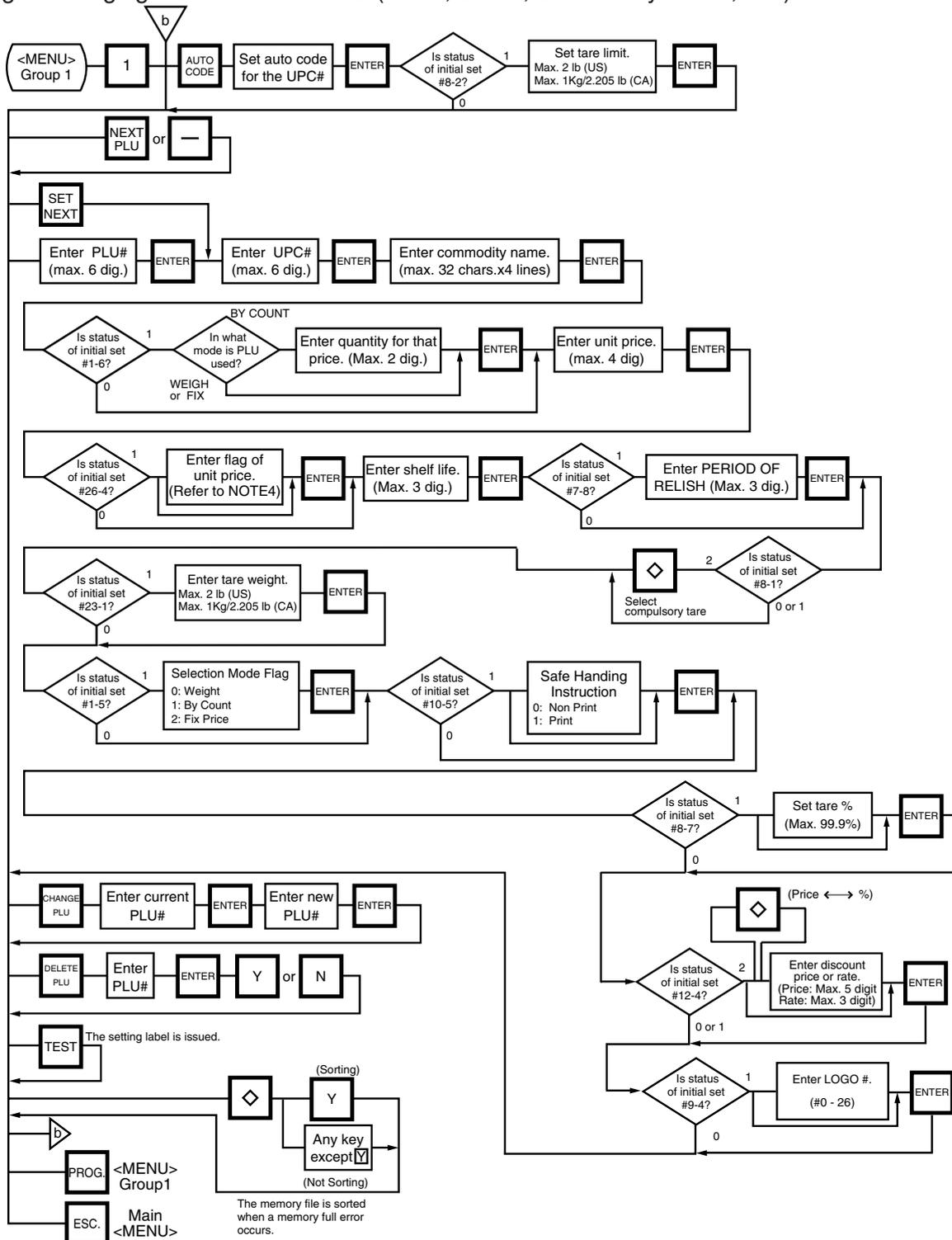
Pressing the $\boxed{\downarrow}$ *key instead of the* $\boxed{ENTER}$ *key proceeds to the next menu. Pressing the* $\boxed{\uparrow}$ *key returns to the preceding menu.*

Verification label of PLU data

```
┌─────────────────────────────────────┐
│          CREAM CAKE                  │──── Commodity Name
│                                      │
│                                      │──── Mode Flag
│                 PACKED ON  DEC 28     │──── Compulsory Tare
│                 SELL  BY    7 B C     │──── Shelf Life
│      T1.000    5 PIECES    T15.0%     │──── Preset % Tare
│                                      │──── Price
│      000005     3.00     654321       │
│   NET WT. lbs   PRICE lb $  TOTAL PRICE $ │──── UPC#
│            TEC STORE                 │
│          (TEL) 0123-45-6789          │
└─────────────────────────────────────┘
```

Preset Tare ──── T1.000
Quantity ──── 5 PIECES
PLU# ──── 000005
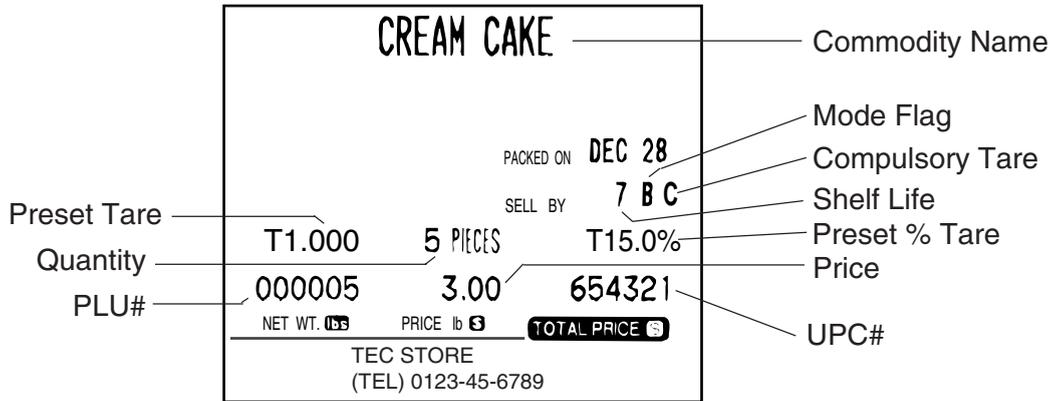
NOTES:

1. *A UPC code is made up of a combination of an entered code and an AUTO CODE. Be sure to add some* $\boxed{-}$ *characters to the end of the AUTO CODE, or all entered codes will be ignored and an AUTO CODE will become an UPC code (see ex. 1).*

    ex. 1) enter code: 456   ex. 2) enter code   4567   ex. 3) enter code: 123456

    　　　　AUTO CODE: 123....　　　　AUTO CODE: 123....　　AUTO CODE: 987

    　　　　　　　↓　　　　　　　　　　　↓　　　　　　　　　　　↓

    　　　code#: 123456　　　　　　code#: 123567　　　　　code#: 987

2. *When there is no area to store PLU data, an error occurs when pressing the* $\boxed{ENTER}$ *key.*

3. *Changing a PLU# to number to which other PLU data is set will result in an error.*

4. *Unit price flag may be selected as follows:*

    1)　*In case of lb scale*

    　　a. $\boxed{INSERT1}$ *key*　　　　:　$ per lb*

    　　b. $\boxed{DELETE\ (A)\ 1/2}$ *key*　:　$ per 1/2 lb*

    　　c. $\boxed{RETURN\ 1/4}$ *key*　　:　$ per 1/4 lb*

    2)　*In case of kg scale*

    　　a. $\boxed{INSERT\ 1}$ *key*　　　　:　$ per 100 g or Kg (CA/QR type only)*

5. *Tare limit should be a multiple of 5 (5, 10, 15...), up to 2.000 lb for US type and a mutiple of 2 (2, 4, 6, 8...), up to 1.000 Kg for CA/QR/AU type.*

6. *Safe handing instructions can be printed on 57-mm wide labels only. Safe handing instructions are printed on labels formatted for ingredient messages. Only ingredient message labels with 13 or more lines can be used to print safe handling instructions. Available print formats are as follows:*

    13 (63), 15 (65), 16 (66), 23 (73), 25 (75), 26 (76), 33 (83), 35 (85), 36 (86), 41, 42, 43, 48 and 49.

7. *Tare % indicates a percentage of tare in gross weight, which is available when the Initial Setting #8-7 is set to 1.*

8. *When setting open price in the count mode (Initial Setting #1-6: 1), set zeros as quantity and unit price.*

11.3 INGREDIENT MESSAGE

Menu Group: 1
Item No.: 2

Ingredient messages can be printed on a label with a maximum of 54 characters per line in small letters or 32 characters per line in boldfaced small letters, by up to 38 lines.
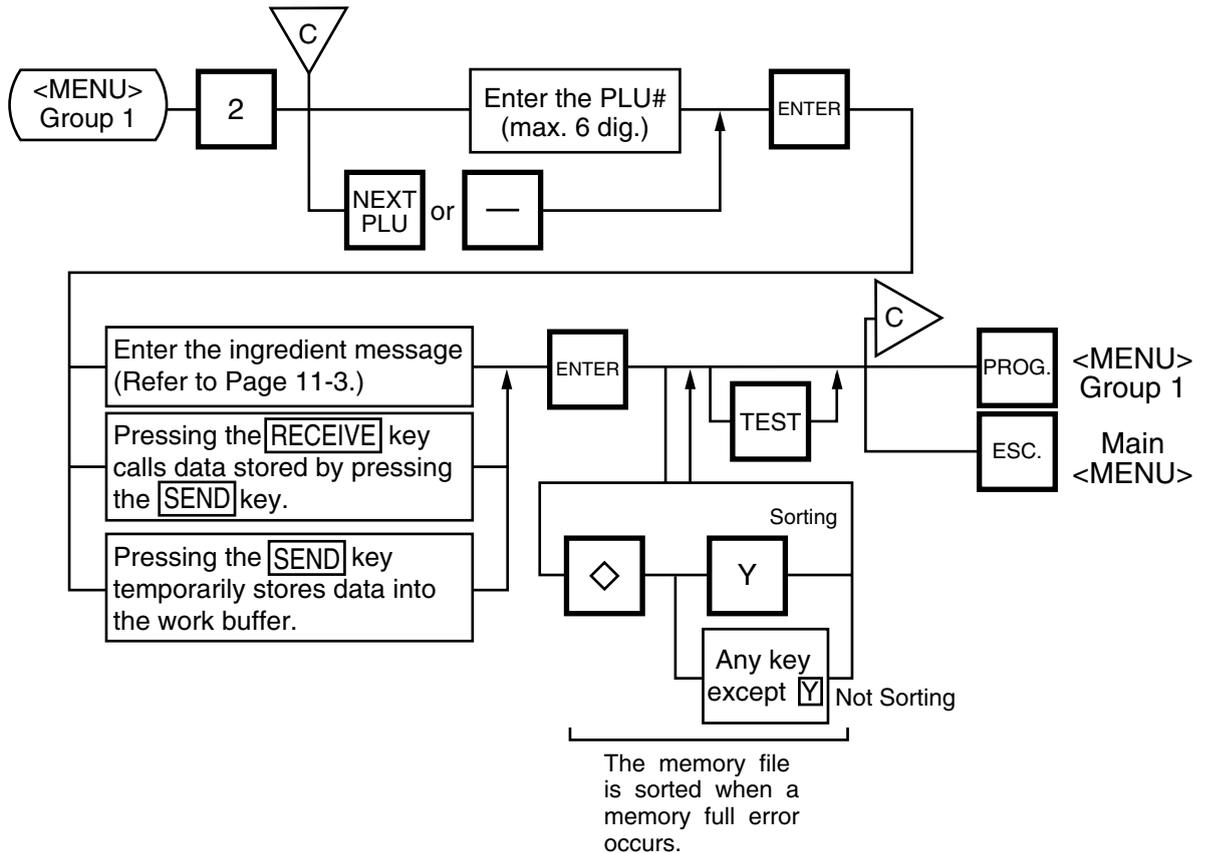
NOTES: 1. *When no data is programmed for the PLU, ingredient cannot be set.*
2. *When a selected PLU is not stored in the PLU file, a "PLU NOT FOUND" error occurs.*
3. *Once you exit this menu and enter again, data stored in the work buffer is cleared.*
4. *When there is no area to store ingredient data, a "MEMORY FULL" error occurs.*
5. *PLUs cannot share ingredient data. (PLU and ingredient data are in pairs.)*

11.4   NUTRITION FACTS

Menu Group: 1
Item No.:   3

Using the following procedure, nutrition information and caloric intake can be set.
Serving Size and Servings Per Container consist must of maximum of a 18 characters. However,
total number of characters including title characters must not exceed 30.

Ⓐ

| Additional Information Area 2~6. (0~99999 or 0.0~999.9) | ENTER |

| Enter the Vitamin A. (0~999) | ENTER | Enter the Vitamin C. (0~999) | ENTER |

| Enter the Calcium. (0~999) | ENTER | Enter the Iron. (0~999) | ENTER |

▽ e

| Additional Information Area 7~12 (0~999) | ENTER |

| PROG. | <MENU> Group 1 |

| ESC. | Main <MENU> |

▽ f
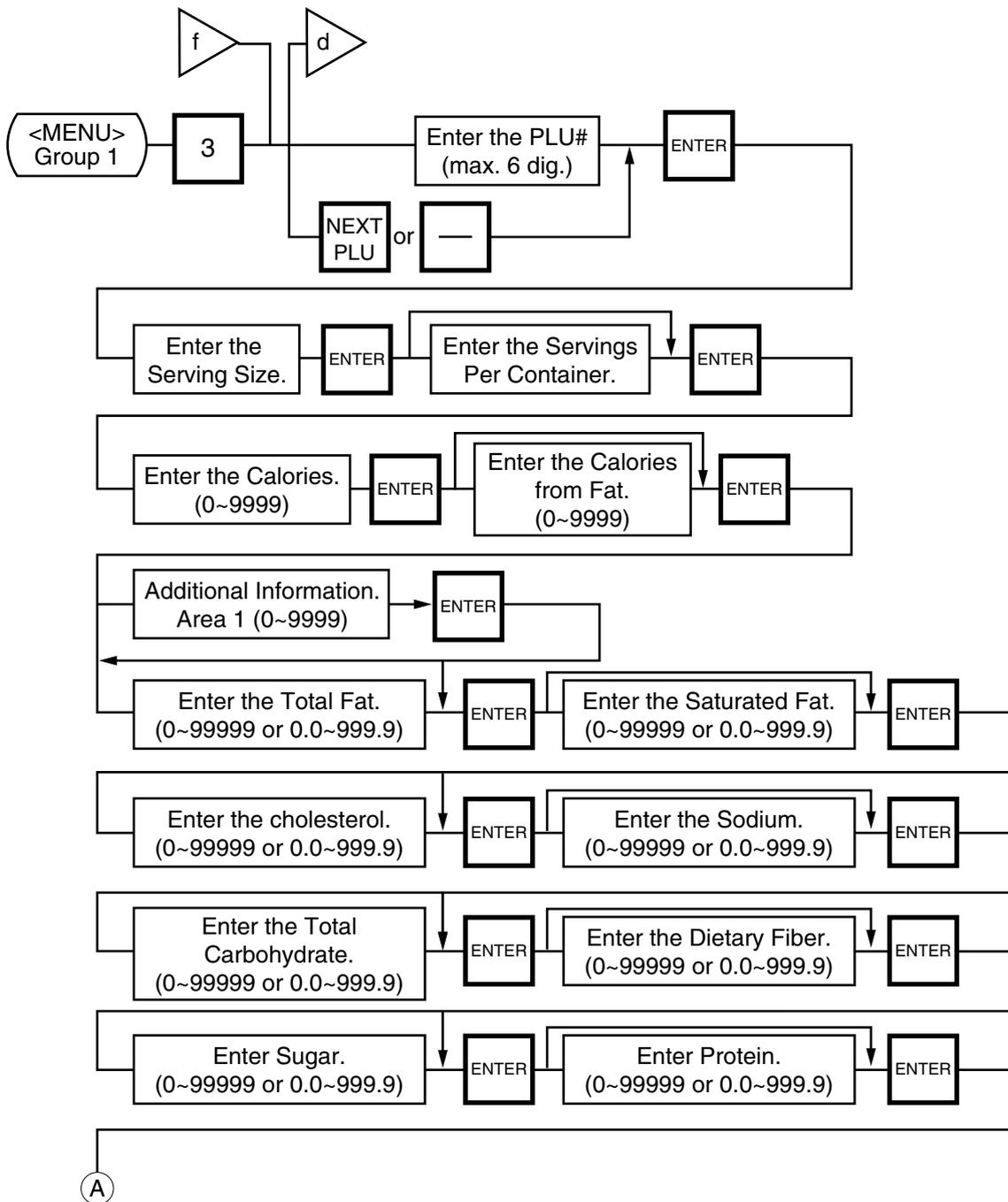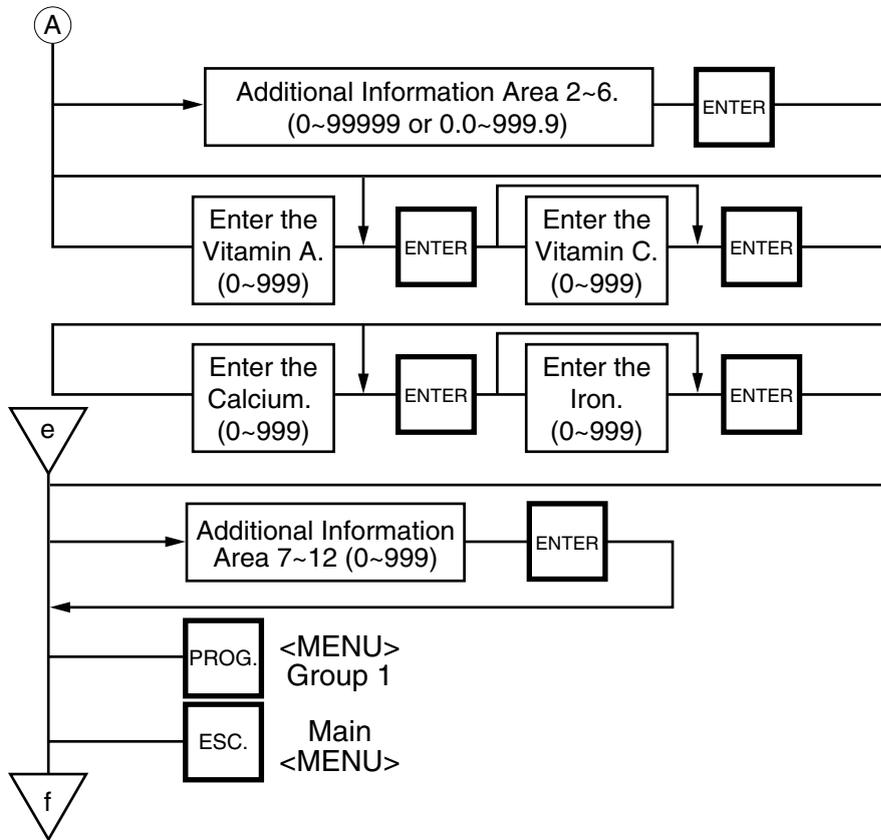
Pressing the ⎵↓⎵ key instead of the ⎵ENTER⎵ key proceeds to the next menu. Pressing the ⎵↑⎵ returns to the preceding menu.

NOTES: 1. *When a selected PLU# is not stored in the PLU file, an error occurs.*
2. *Nutrition file is input each time the ⎵ENTER⎵ key is pressed. Thus, if you quit the procedure on the way, data entered without pressing ⎵ENTER⎵ key is not stored.*
3. *The additional information can be used only when its title has been registered in Section 11.16.*

- **Set th e Daily Value Table**

```
 d  >   AUTO   →  Enter the          ENTER  →  Enter the          ENTER
        CODE      Basic Calories.              Basic Total Fat.
                  (Content No. 1)              (Content No. 2)

        Enter the Basic          ENTER  →  Enter the          ENTER
        Saturated Fat.                     Basic Cholesterol.
        (Content No. 3)                    (Content No. 4)

        Enter the          ENTER  →  Enter the Basic          ENTER
        Basic Sodium.                Total Carbohydrate.
        (Content No. 5)              (Content No. 6)

        Enter the Basic          ENTER  →   e  >
        Dietary Fiber.
        (Content No. 7)
```
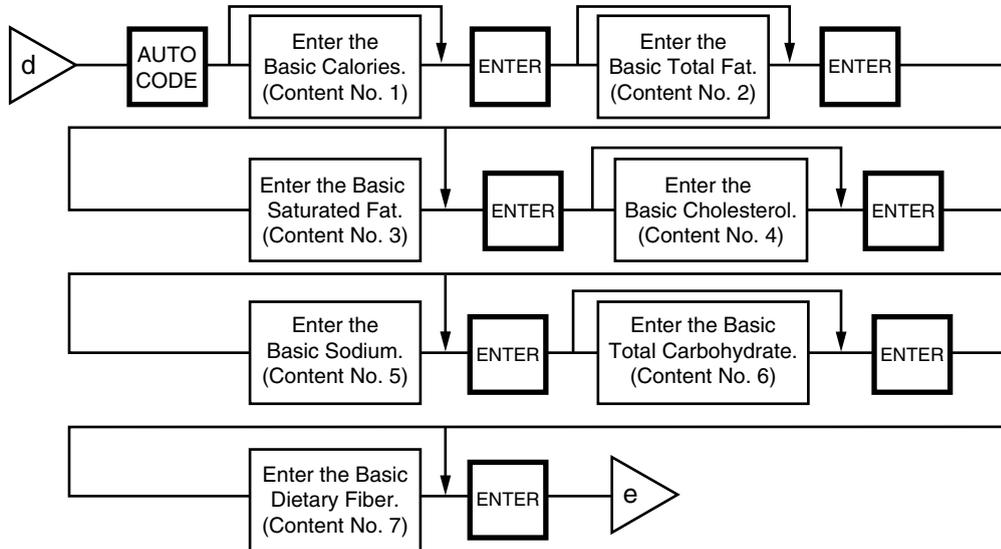
NOTES:

1. *DAILY VALUE (Max. 8 digits)*

   1) *The contents of daily value*

Contents	upper 4 digits	lower 4 digits
No. 1	Percentage of necessary daily intake of Calories	Necessary daily intake of Calories
No. 2	Percentage of necessary daily intake of Total Fat	Necessary daily intake of Total Fat
No. 3	Percentage of necessary daily intake of Saturated Fat	Necessary daily intake of Saturated Fat
No. 4	Percentage of necessary daily intake of Cholesterol	Necessary daily intake of Cholesterol
No. 5	Percentage of necessary daily intake of Sodium	Necessary daily intake of Sodium
No. 6	Percentage of necessary daily intake of Total Carbohydrate	Necessary daily intake of Total Carbohydrate
No. 7	Percentage of necessary daily intake of Dietary Fiber	Necessary daily intake of Dietary Fiber

   2) *The necessary daily intake of calories can be changed by changing the above table data, and percentage will be changed accordingly.*

2. *Percentage of daily intake*

   1) *Percentage data are printed in right justified 3 digits with zero suppression.*

   2) *On the following conditions, an error occurs and data will be printed as '--- %'.*

   ① *Percentage data exceeds 3 digits (999%).*

   ② *Data is entered improperly.*

   Other than xxxxx or xxx.x

   Other than numberals (0 to 9) and a point '.'

3. *Calculation*

   (input data) / (necessary daily intake) x 100 = Percentage of daily value

   (round the obtained data to one decimal place)

- **Deleting Nutrition Data**

d ▷ | DELETE PLU | → | Enter the PLU#. (max. 6 dig.) | → | ENTER | → e ▷
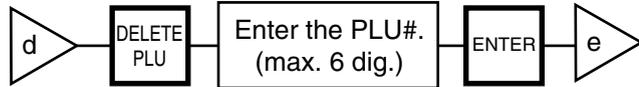
- **Memory file sort**
  The memory file is sorted when a memory full error occurs.

d ▷ ◇ — Y — Sorting → e ▷

Any key except Y — Not Sorting
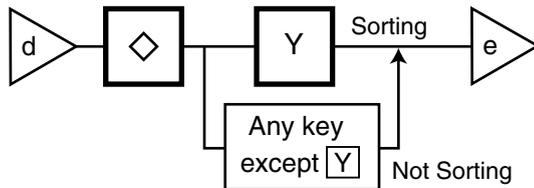
```
Nutrition Facts
Serving Size xxxCUP (xxxxg)
Servings Per Container xxx

Amount Per Serving
Calorier xxxx
Calories from Fat xxxx
xxxxxxxxxxxxxxxxxxxx xxxx          Additional information area 1
               % Daily Value*
Total Fat xxxxg            xxx%
  Saturated Fat xxxxg      xxx%
Cholesterol    xxxxmg      xxx%
Sodium xxxxmg              xxx%
Total Carobohydratexxxxg  xxx%
  Dietary Fiber xxxxg      xxx%
  Sugers  xxxxg
Protein xxxxg
xxxxxxxxxxxxxxxxx     XXXXXX       Additional information area 2
xxxxxxxxxxxxxxxx      XXXXXX       Additional information area 3
xxxxxxxxxxxxxxxx      XXXXXX       Additional information area 4
xxxxxxxxxxxxxxxx      XXXXXX       Additional information area 5
xxxxxxxxxxxxxxxx      XXXXXX       Additional information area 6

Vitamin A  xxx% Vitamin C   xxx%
Calcium    xxx% Irom        xxx%
xxxxxxxxxx xxx% xxxxxxxxxx  xxx%   Additional information area 7,8
xxxxxxxxxx xxx% xxxxxxxxxx  xxx%   Additional information area 9,10
xxxxxxxxxx xxx% xxxxxxxxxx  xxx%   Additional information area 11,12
* Percent Daily Values are based on a 2,000
  calorie diet.

1 st  Address - - - - - - - - - - - - - -
2 nd  Address - - - - - - - - - - - - - -
```

```
Nutrition Facts
Serving Size 1234567890123
Servings Per Container 223

Amount Per Serving
Calories     3
Calories from Fat      4

              % Daily Value*
Total Fat    5g            8%
  Saturated Fat  6g       30%
Cholesterol     7mg        2%
Sodium  8mg                0%
Total Carbohydrate   9g    3%
  Dietary Fiber 10g       40%
  Sugars   11g
Protein   12g

Vitamin A 13%.Vitamin C 14%
Calcium    15%.Iron      16%
* Percent Daily Values are based on a 2,000
  calorie diet.




1-000000000000000000000000-1
2-000000000000000000000000-2
```
(Sample label)

▓ (light) Area for titles

▓ (medium) Area for entry data: Set in this menu (Nutrition Setting procedure.)

▓ (dark) Area for data: Calculated on the basis of the entered data in Menu Page 1/Item No. 3

11.5 PLU VERIFYING LABEL

Menu Group: 1
Item No.:   4

PLU data stored in the scale are verified in the following procedure.
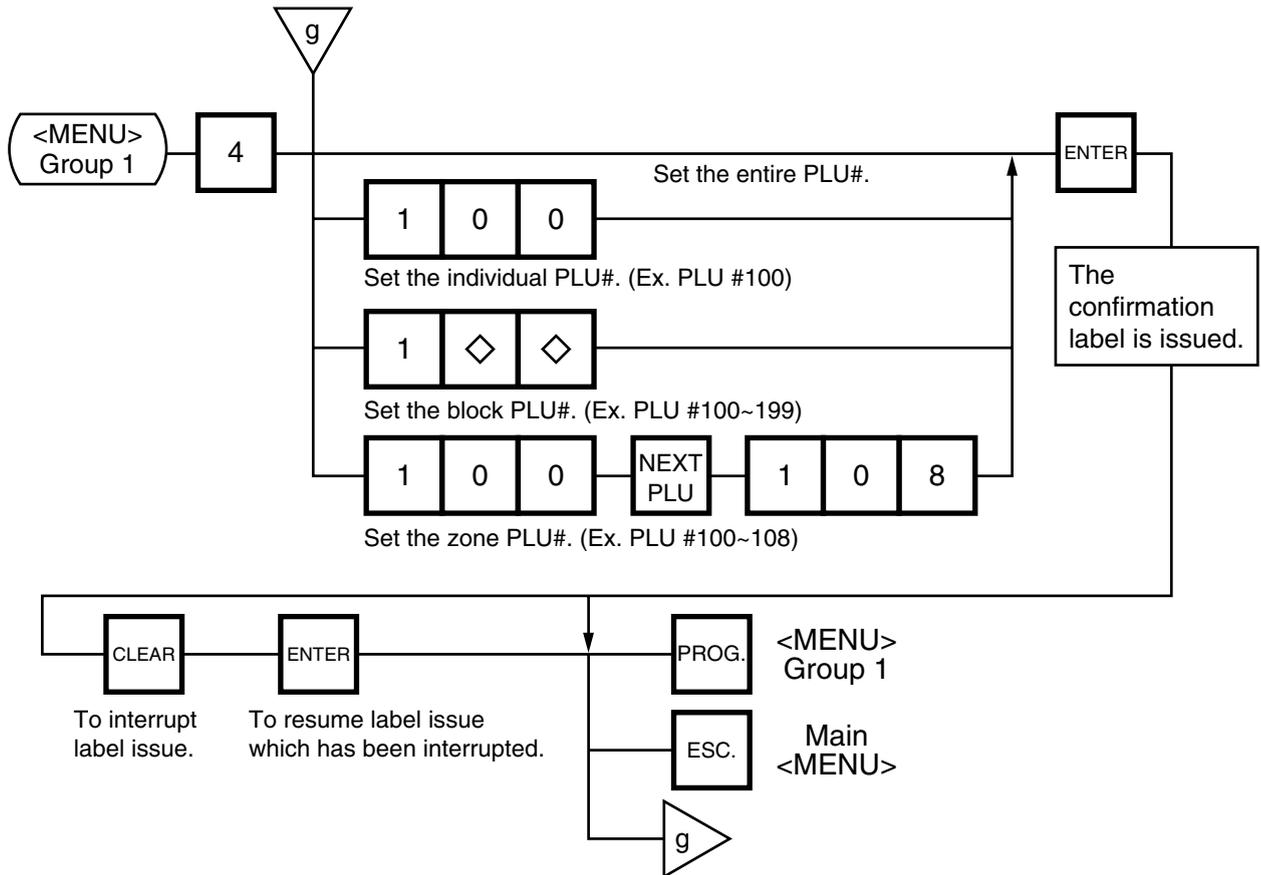
NOTES:
1. *Labels are printed in both batch mode and on-demand mode.*
2. *When no PLU is stored in the selected range, an error occurs when the* ENTER *key is pressed.*
3. *Pressing the* CLEAR *key releases the scale from the error mode and returns to the initial status of this menu.*
4. *After clearing a paper jam error, the scale will wait for an entry of PLU# again.*

11.6 ADDRESS SETTING

Menu Group: 1
Item No.: 5

Store addresses and receipt header printed on label can be set within the following character limits.

Address: 32 characters x 2 lines
Receipt Header: 24 characters on the 1st/2nd line and 48 characters in the 3rd line
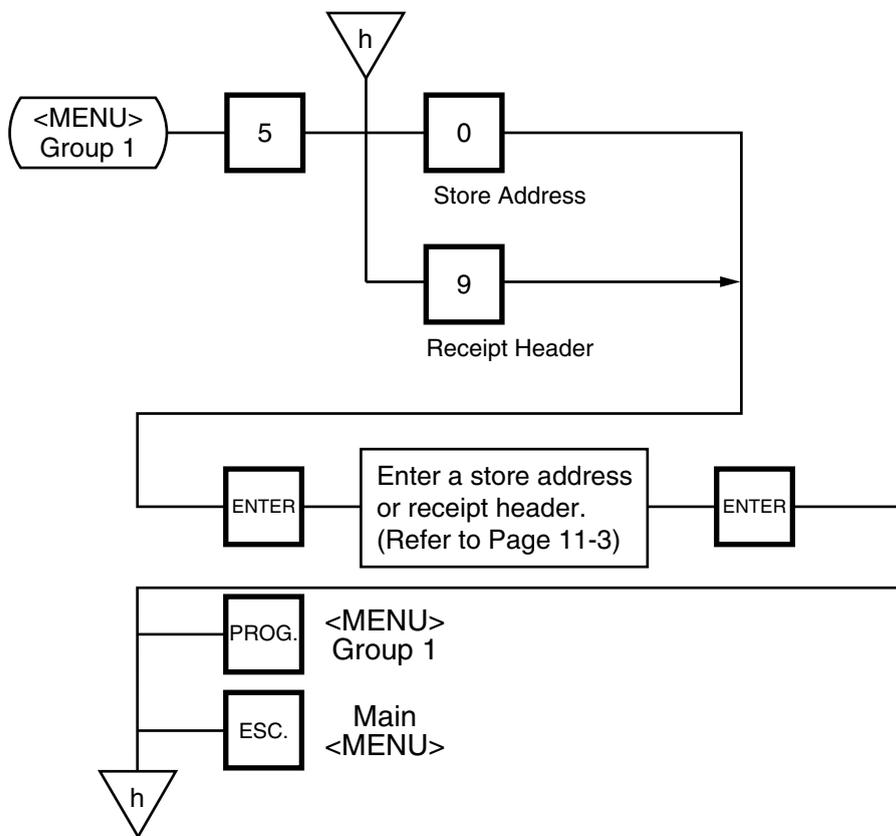
11.7 SPECIAL INFORMATION

Menu Group: 1
Item No.: 7

When the Net Weight Statement label is selected, 3 lines (32 characters/line) of special information can be printed on the label position where the net weight data is to be printed. The special information can be printed in the weigh and By Count mode. In the Fix mode, the net weight data is printed.
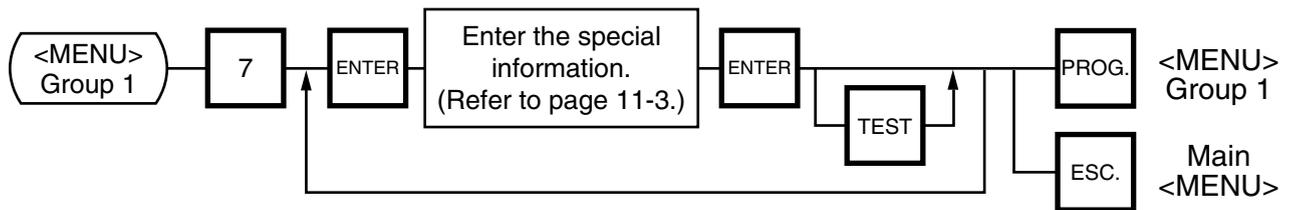
11.8 Grade Line

Menu Group: 1
Item No.: 8

You can set the maximum 49 kinds of grade lines (max. 32 characters/line), and call one of them to print it on the label.
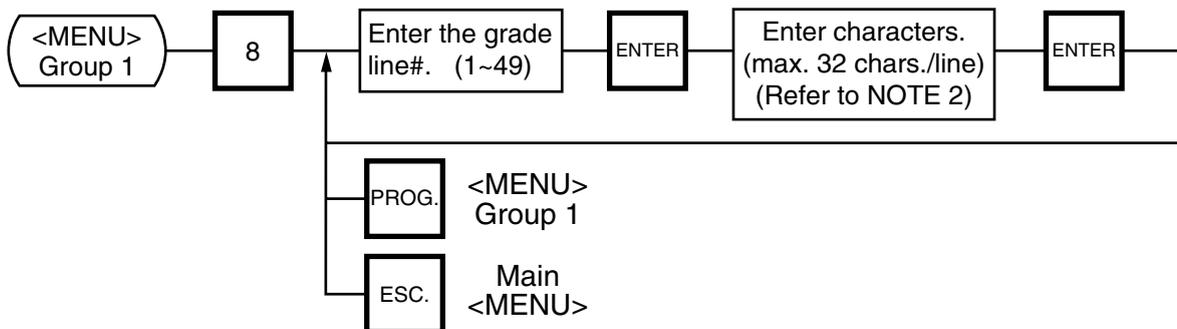
NOTES: 1.   *Print position of grade line can be changed by initial setting.*
   2.   *Refer to page 11-3, for information regarding how to enter the Grade Line.*

11.9   SPEED KEY SETTING

Menu Group: 1
Item No.:   9

The SL-9000 has a maximum of 70x2 speed keys which are very convenient to call PLUs quickly.
(Refer to page 5-3 regarding the Key Layout.)
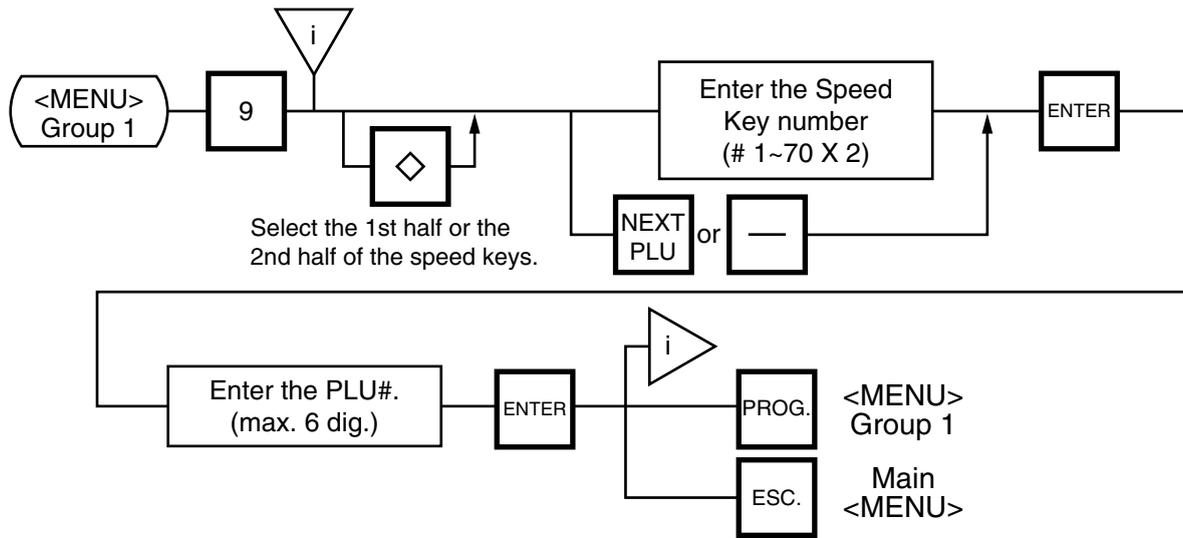
■ **Setting Department/Vendor Number**
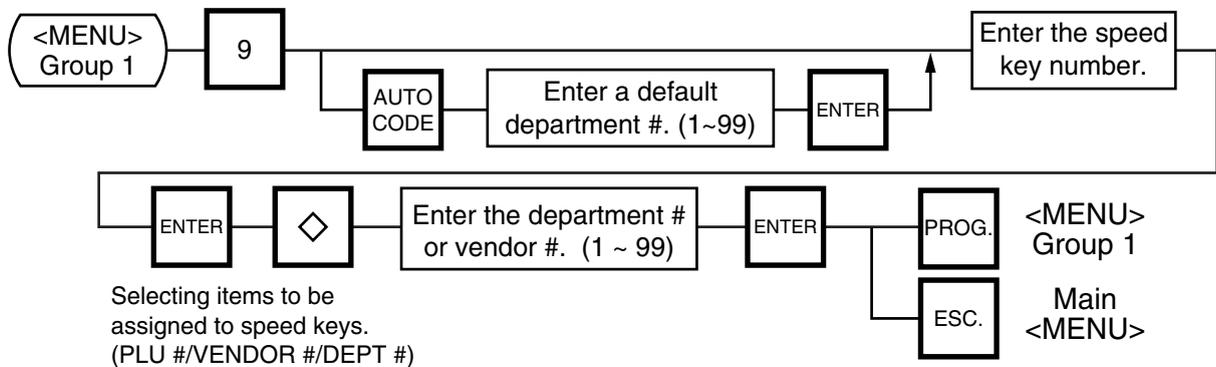
• **Department Number**

When initial set #10-6 is set to "1", the six-digit PLU# is divided into two; the upper two digits are assigned to department #, and the lower four digits to PLU.
The department # is automatically added in front of four-digit PLU# and treated as a six-digit PLU#.
In case of "PROG.", "Report", and "Reset" modes, PLU# is treated as a six-digit number. So the upper two digits are not treated as department #. Consequently the four-digit PLU# is available only in "REG.", "M.DOWM", and "REWRAP" modes.

NOTE: *The default Dept. No. is two-digit serial number ranging from 0 to 99. Entering a "0" clears a Dept. No.*

• **Vendor Number**

Vendor numbers can be set when the Initial Setting #11-1 is set to 1.
Vendor numbers are assigned to the speed keys in two ways:
 ① Individual vendor number: 00-39
    Vendor# is assigned to the speed keys one by one.
 ② Group vendor number: 0-, 1-, 2- and 3-
    Maximum 10 vendor numbers can be assigned to one speed key, resulting in 4 speed keys in total. When assigning group vendor numbers to the speed keys, enter the first digit of the vendor key (0, 1, 2 or 3) plus a bar (-).
    Vendor numbers can be called whichever half of the speed keys are selected.

11.10 PRINT FORMAT

Menu Group: 2
Item No.:   0

The SL-9000 can memorize 5 different print formats. After print formats are set, you can call them by entering the print format number.
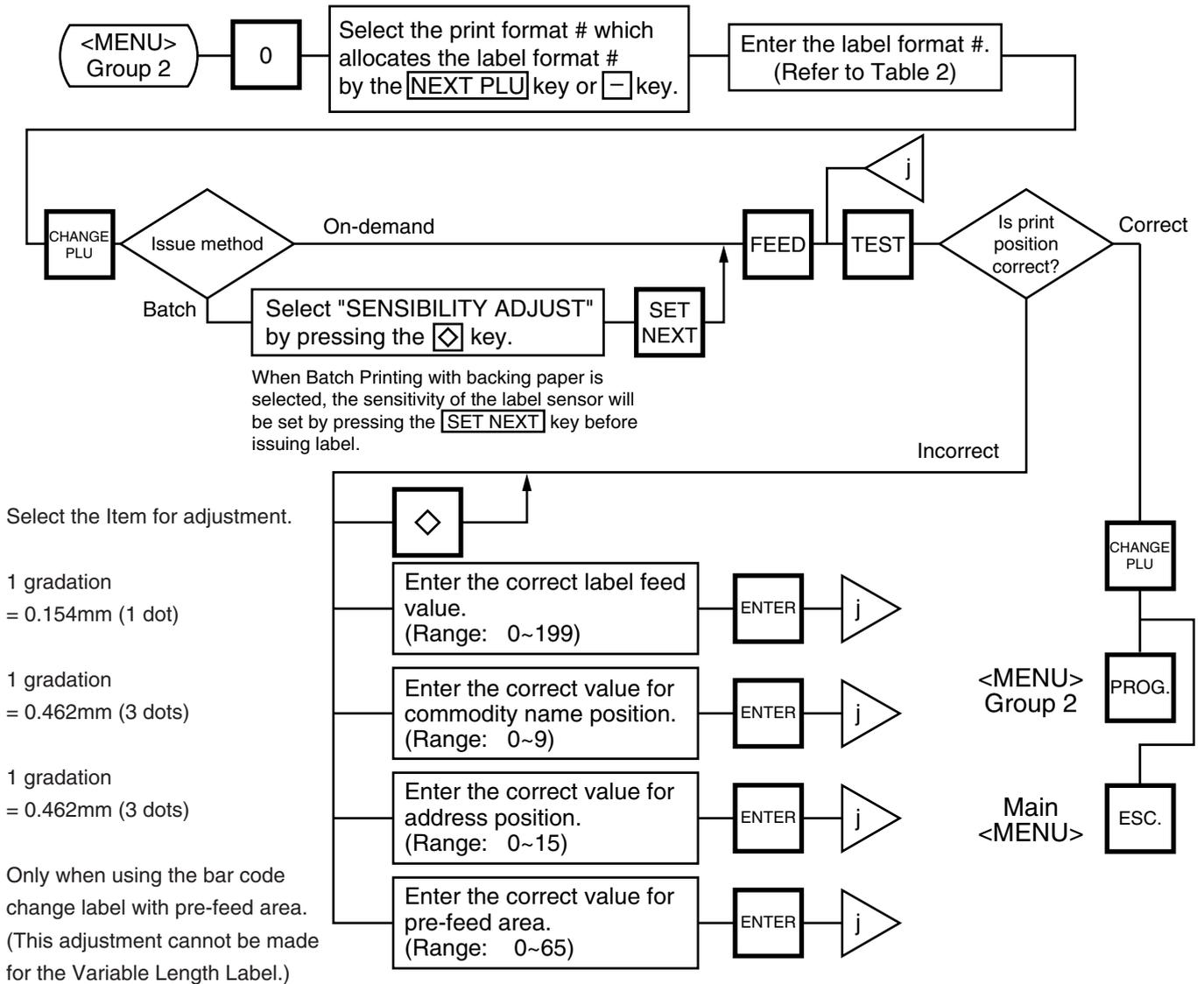
NOTES:

1. When a commodity name position is adjusted, an address position will move automatically.
2. When entering the other label format #, fine adjust values are initialized.
3. Selecting label format numbers other than those provided in Table 2 results in an error.
4. When selecting a variable length label format, rectangles are printed instead of print items when test printing.
5. Pressing the ◇ key allows you to select a print format number from 1 to 5.
6. Be sure to press the SET NEXT key when a label format for batch printing with backing paper is selected.

■ **Table 2: Label Format Number Table**

Select the format # for the label to be used by referring to the table below.

Label Format # (Item)	Ingredient Line	Label length (mm) 48 mm width	57 mm width	Nutrition Printing	NON-POS label	POS label	Bar code change label	Impossible	Possible
00 (50)	0	30.0	—	—	○	○	—	○	—
10 (60)	0	40.0	49.2	—	—	○	—	○	—
11 (61)	6	54.0	63.5	—	—	○	—	○	—
12 (62)	12	68.8	—	—	—	○	—	○	—
13 (63)	18	82.6	92.8	—	—	○	—	○	—
14 (64)	22	92.0	—	—	—	○	—	○	—
15 (65)	38	—	138.1	—	—	○	—	○	—
16 (66)	37	—	138.1	○	—	○	—	○	—
21 (71)	6	69.9	85.7	—	—	○	—	—	○
22 (72)	12	84.1	—	—	—	○	—	—	○
23 (73)	18	—	112.7	—	—	○	—	—	○
24 (74)	22	106.4	—	—	—	○	—	—	○
25 (75)	38	—	158.7	—	—	○	—	—	○
26 (76)	38	—	158.7	○	—	○	—	—	○
31 (81)	6	76.2	96.8	—	—	—	○	—	○
32 (82)	12	90.5	—	—	—	—	○	—	○
33 (83)	18	104.8	123.8	—	—	—	○	—	○
34 (84)	22	112.7	—	—	—	—	○	—	○
35 (85)	38	—	171.4	—	—	—	○	—	○
36 (86)	22/38	112.7	171.4	○	—	—	○	—	○
41 (91)	Programmable	—	Programmable	—	Free Format (Refer to section 11.20)				
42 (92)	Programmable	—	Programmable	—	Free Format (Refer to section 11.20)				
43 (93)	Programmable	—	Programmable	—	Free Format (Refer to section 11.20)				
48	VARIABLE	Variable Length	Variable Length	○	—	—	○	—	○
49	21 (ROTATION)	—	Variable Length	○	—	—	○	—	○

↑ batch printing method
↑ on-demand printing method
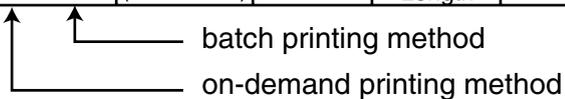
○ : possible
— : impossible

1) The width of label is selected by INITIAL SETTING.
2) The number of commodity lines depends on label width.
   48 mm width: 2 lines
   57 mm width: 4 lines

11.11 DATE/TIME SETTING

Menu Group: 2
Item No.: 1

Date, time, machine number, and store code are set in this procedure.
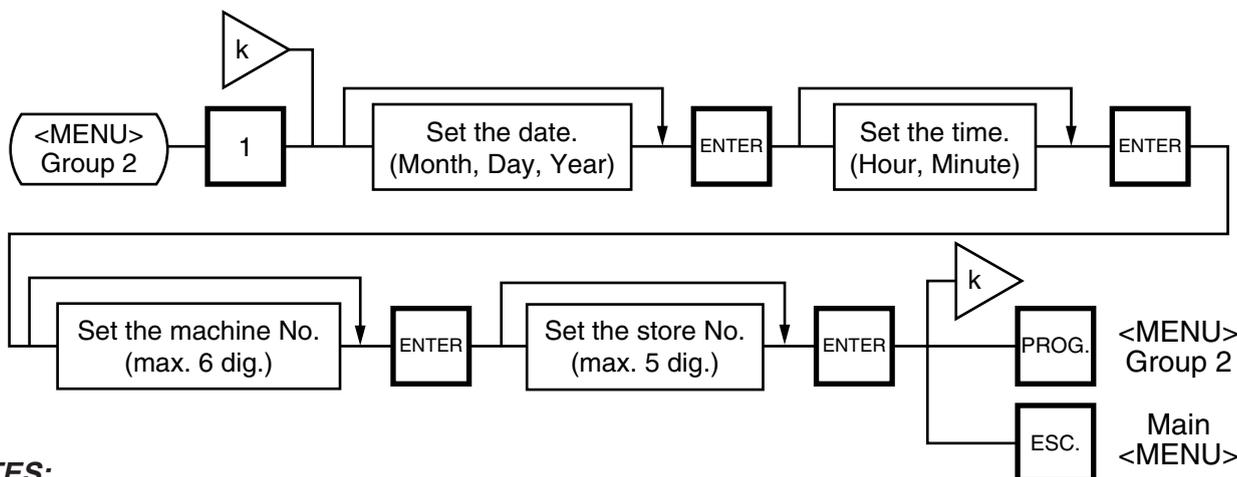
NOTES:
1. *Express the time in a 24-hour military format.*
2. *The SL-9000 will check details of date (time) input, and any wrong date (time) will result in an error. Then the correct date (time) should be re-entered and press the* CLEAR *key.*
3. *Even when the initial Setting # 8-4, 8-5 or 8-6 is set to the "Julian Date" the way to enter the date in the date setting operation is the same in the ordinary case.*
4. *The date display method can be changed by the initial setting.*

11.12 CMT/PL-3

Menu Group: 2
Item No.: 2

■ CMT OPERATIONS

SL-9000 is designed to interface with a Cassette Magnetic Tape loader. This loader allows the transfer of the entire PLU file, ingredient file and other data from the SL-9000 to tapes. This can be accomplished in number of operation steps.
In turn, information from the tape can also be transferred to another SL-9000 scale.
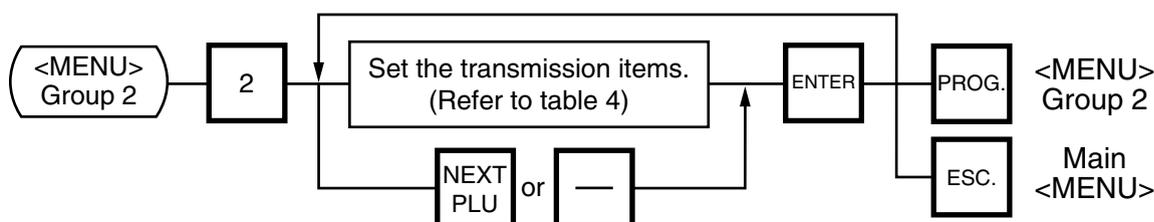
NOTES:
1. *The error mode can be released by pressing the* CLEAR *key, and operated again through the above steps.*
2. *Use the metal cassette tape which is commercially available and has a capacity of 45 or 60 minutes recording.*
3. *For operations of the CMT loader, refer to the instruction manual provided with the CMT loader.*

■ PL-3 Operation

Connect the PL-3 to the SL-9000 by using RS-232C Cable, then turn on the power of the SL-9000 and the PL-3.

Insert a data disc into the PL-3 and adjust the transmission rate to the SL-9000 (7 2 : 4800 BPS or 7 3 : 2400 BPS) by using the rotary switch.

Press the SAVE key of the PL-3, then check whether the SAVE LED is on.

Program the file number of the data disc by using the rotary switch.

(4 1 : File No. 1, 4 2 : File No. 2, ... 4 8 : File No. 8, 4 9 : File No. 9)

```
<MENU>    2    Set the transmission item.    SAVE      ENTER    PROG.    <MENU>
Group 2        (Refer to table 4)           or                          Group 2
                                            LOAD
                        NEXT  or  —                          ESC.      Main
                        PLU                                            <MENU>
```
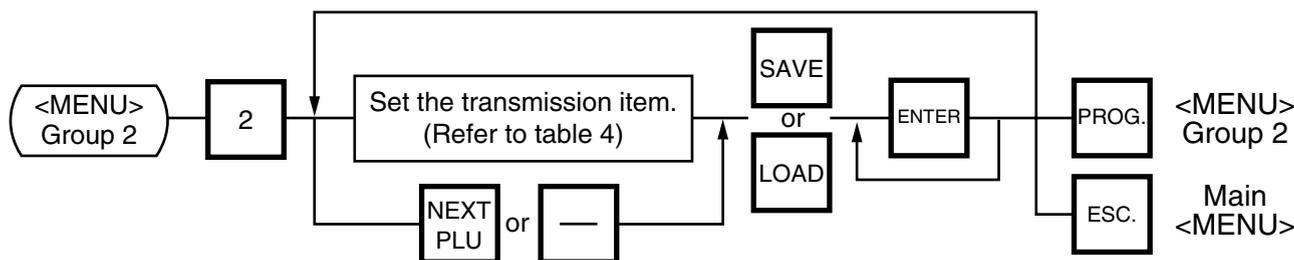
NOTES: 1. Press SAVE or LOAD key on the PL-3.
  2. If the ENTER Key is not pressed within 10 seconds after SAVE or LOAD key is pressed, a time out error will occur.
  3. After pressing the ENTER key, the operation ends when "00" appears in the 7 seg. display and LAMP goes off. Remove the data disc and turn the power off.
  4. Be sure to start the PL-3 before the main operation.

■ Table 3: Error code during PL-3 operation

Error Code		Error Message	Error Code		Error Message
1	0	FDC ERROR	3	7	FRAMING ERROR
	1	FDK MISINSERTION ERROR		8	PARITY ERROR
	2	UNAVAILABLE FDK INSERTION ERROR	7	0	DATA ERROR
	3	VOL. LABEL UNMATCH ERROR		1	STATUS ERROR
	4	FDK MEMORY FULL ERROR		2	TIME OUT ERROR
	5	WRITE PROTECT ERROR		3	FDK READ/WRITE ERROR
	6	NO SEARCH FILE ERROR		F	DESIGNATED SELECT KEY ERROR
3	1	TIME OUT ERROR	8	0	RAM READ/WRITE ERROR
	2	LOAD ERROR		1	ROM CRC ERROR
	3	FDK ERROR		2	RAM BACK UP BATTERY ERROR
	4	BUSY STATUS		3	FDC DIAG LEVEL 0 ERROR
	5	POWER FAIL ERROR		E	SYSTEM FDK LOADING ERROR
	6	OVERRUN ERROR		F	SYSTEM ERROR

1) When the error code in FF, this system enters stop status. (Turn the power off/on for release.)

2) When the error code is F2 or FE, perform the status clear (9 9).

3) If an error occurs, refer to the PL-3 Owner's Manual and solve the problem.

■ **Table4 : Transmission Item List**

ITEM #	Title on the Display		Contents of Transmission	CMT	PL-3
	Liquid Crystal Display	7 seg.			
2	VERIFY PLU & ING	2	COMPARE PLU & ING. IN OLD FORMAT	○	○
3	READ PLU & ING	3	READ PLU & ING. IN OLD FORMAT	○	○
4	WRITE PLU TO CMT	4	SAVE PLU IN NEW FORMAT	○	○
5	VERIFY PLU = CMT	5	COMPARE PLU IN NEW FORMAT	○	○
6	READ PLU FM CMT	6	READ PLU IN NEW FORMAT	○	○
7	WRITE ING TO CMT	7	SAVE ING. IN NEW FORMAT	×	○
8	VERIFY ING = CMT	8	COMPARE ING. IN NEW FORMAT	×	○
9	READ ING FM CMT	9	READ ING. IN NEW FORMAT	×	○
10	WRITE NUTRITION	10	SAVE NUTRITION IN NEW FORMAT	○	○
11	VERIFY NUTRITION	11	COMPARE NUTRITION IN NEW FORMAT	○	○
12	READ NUTRITION	12	READ NUTRITION IN NEW FORMAT	○	○
13	WRITE SPEED KEY	13	SAVE SPEED KEY IN NEW FORMAT	○	○
14	VERIFY SPEED KEY	14	COMPARE SPEED KEY IN NEW FORMAT	○	○
15	READ SPEED KEY	15	READ SPEED KEY IN NEW FORMAT	○	○

○ : operable,　　×: inoperable

NOTE: *When transferring data with the PL-3, required FDK varies depending on the amount of ING.*
Be careful of the following when changing a FDK.
　　a:　During write operation, replace the FDK with a formatted one.
　　b:　Verify and read data in the same order as write.
To cancel FDK change, press the CLEAR *key.*

11.13 IN-LINE/LOCAL

Menu Group: 2
Item No.:   3

When the SL-9000 is used as a satellite in an in-line system, the "ID #" and "Transmission delay time" can be set by the following procedure.
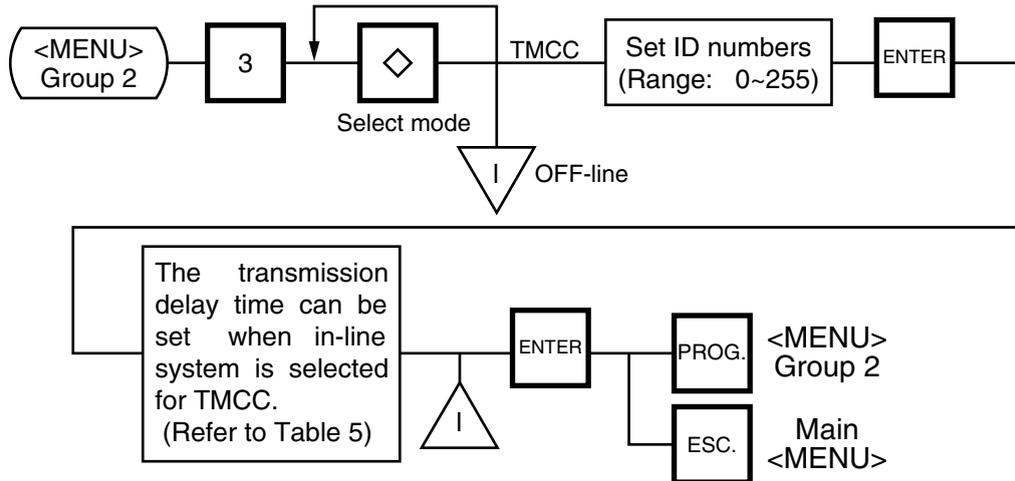
NOTES: 1. The TMCC baud rate is fixed to 9600 BPS.
2. After setting the ID #, turn the power switch OFF and ON again.

■ **Table 5: Transmission Delay Time Table**

	TR-Time (ms)		TR-Time (ms)
1	20~39	6	120~139
2	40~59	7	140~159
3	60~79	8	160~179
4	80~99	9	180~199
5	100~119		

The default is 3.

11.14 LON SYSTEM

Menu Group: 2
Item No.: 4

The SL-9000 scales which consist of a master, satellites, and a backup master are connected each other by the LON cable to transmit data such as PLU, ING., NUTRI, etc.

ID# 1 is reserved for the master terminal.

ID# 2 is reserved for the backup master terminal or satellite terminal.

ID# 3 to 32 are for satellite terminals.

Setting numbers other than the above results in an error.
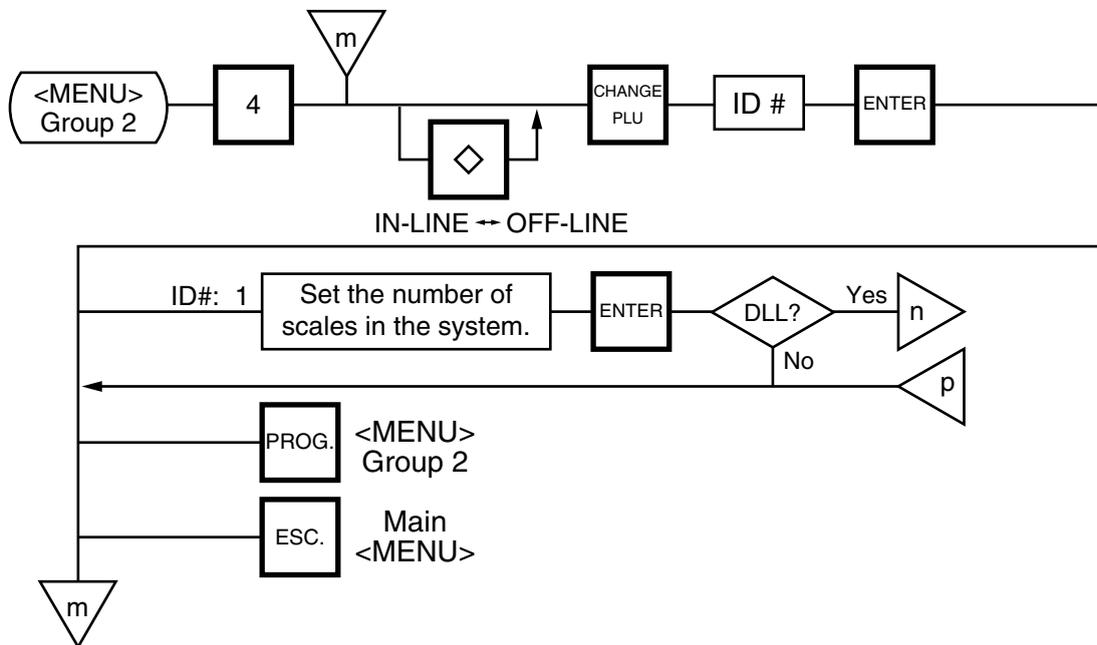
NOTES: 1. Before starting the above procedure, press the ◇ key and enter IN-LINE mode.
2. When installing the backup master terminal, set the master scale's initial status of #9-1 to 1.
3. Set ID # to all scales connected by LON cable.
4. When the display power is turned on, a satellite terminal is ready to receive data from the master terminal.
5. After setting the ID #, turn the power switch OFF and ON again.

■ Data Transmission

The following data are down-line-loaded.

Page 1: (0). All (PLU+ING+NUTRI)	Page 2: (0). SPEED KEY
(1). PLU	(1). LOGO
(2). ING.	(2). VENDOR
(3). NUTRITION	(3). FREE FORMAT
(4). U. PRICE	(9). CHANGE PAGE
(5). DATE/TIME	
(7). LOCK SCALE (Check the LON cable)	
(8). OPEN SCALE (Release the lock after checking the LON cable.)	
(9). CHANGE PAGE	

```
 ┌─┐   ┌──────────────────┐   ┌───────┐
 │n>│   │Select a DLL data │   │ ENTER │                              Release the scale     ┌──┐
 └─┘   │using the NEXT PLU│   └───────┘                              from the error.       │p>│
       │and ─ keys.       │              ┌──────────────────┐        ┌───────┐             └──┘
       └──────────────────┘              │The error terminal│        │ CLEAR │       Errorous terminal
                                         │ID# is displayed. Use       └───────┘       # is displayed.
                                         │the  NEXT PLU  and│
                                         │ ─  keys.         │
                                         └──────────────────┘

       ┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
       │   ┌──────────────────────────────────────────┐   │
       │   │Release the scale from the error.         │   │
       │   │    0:  CANCEL                            │   │
       │   │    1:  RETRY                             │   │
       │   │    2:  CONTINUE                          │   │
       │   │Select one of the above using the NEXT PLU│   │
       │   │and ─ keys.                               │   │
       │   └──────────────────────────────────────────┘   │
       │  LOCK SCALE method                               │
       └ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
```
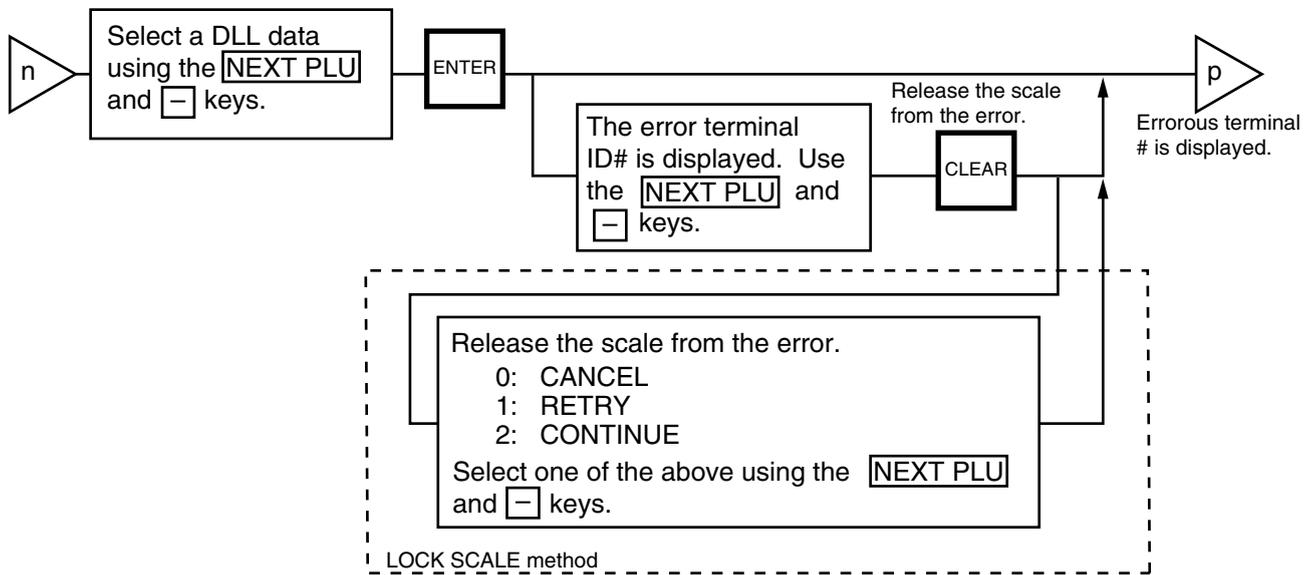
NOTE: *DLL is performed automatically in the following two ways. It is selectable by the Initial Settings #0-6 and #0-7.*

(1) LOCK SCALE method

Step 1: *"LOCK SCALE" is sent. (*1)*

Step 2: *Selected data is sent. (*2)*

Step 3: *"OPEN SCALE" is sent.*

*1: If an error occurs during step 1, the error terminal ID# is indicated. Select "cancel", "retry" or "continue" to release the terminal from an error.

cancel: *Quits the operation after sending "OPEN SCALE"*

retry: *Tries to send "LOCK SCALE" again.*

continue: *Ignores the error terminal and starts DLL.*

*2 If an error occurs during step 2, the error terminal ID# is indicated. Press the CLEAR *key to return to the DLL data selection menu.*

(2) Background DLL

Step 1: *Selected data is sent. (*3)*

*3 If an error occurs, the error terminal ID# is indicated. Press the CLEAR *key to return to the DLL data selection menu.*

11.15 BAR CODE FORMAT

Menu Group: 2
Item No.:   6

With the SL-9000 scale, four kinds of bar code formats are available. These formats can be changed freely.

Example)

Current format

2	9	C1	C2	C3	C4	C5	C6	P2	P3	P4	P5	C/D

Flag — UPC # — Price — Total check digit

Changed format

0	2	C2	C3	C4	C5	C6	PC/D	P1	P2	P3	P4	C/D

Flag — UPC # — Price check digit or weight check digit. — Total check digit
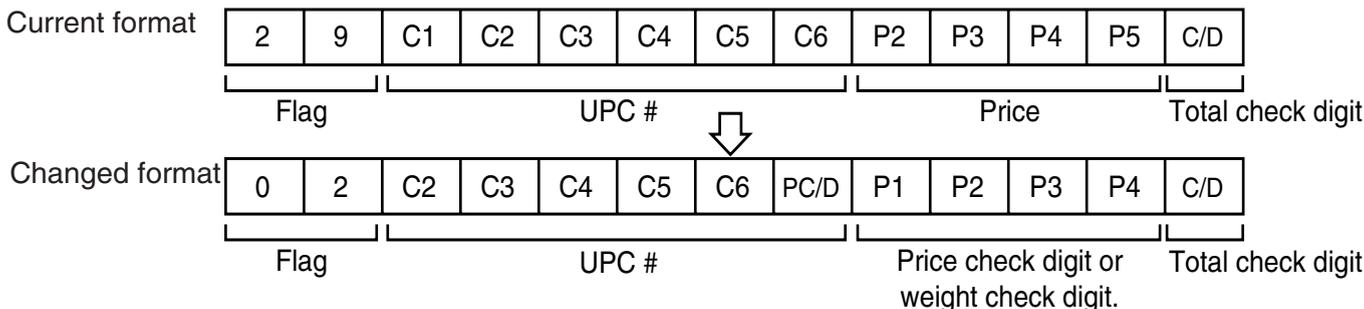
When changing the above example format into the weigh format described in NOTE 1, use the following procedure.

<MENU>
Group 2 → 6 → q

Select the format #.
Format #1:WEIGH
Format #2:BY COUNT
Format #3:FIX PRICE
Format #4:RECEIPT

→ ENTER

— (Left) or NEXT PLU (Right)
(Move the cursor to the column to be set.)

Set the flag.
ex)Enter "02"

◇
Switch over the setting item.(refer to NOTE 8)
ex)Press the key twice to select UPC # as a setting item.

2 3 4 5 6
Enter an UPC #.

◇
Switch over UPC #→PC/D

1
Set price chech digit

◇
Switch over PC/D→UPC #

1 2 3 4
Enter a price

→ ENTER → PROG. <MENU> Group 2

q / ESC. Main <MENU>

NOTES: 1. *In this printer, the previously set bar code format is initialized to the following default by RAM clear.*

Default Bar Code Format:

① *Weight or Fix Price Format*

0	2	C2	C3	C4	C5	C6	PC/D	P1	P2	P3	P4	C/D

② *Bar Count Format*

0	0	0	C2	C3	C4	C5	0	0	0	0	C6	C/D

③ *Receipt Format*

0	2	0	0	0	0	PC/D	P1	P2	P3	P4	P5	C/D

2. When the $\boxed{ENTER}$ key is passed, bar code format is checked. An error occurs in the following cases.

    ① Check digit (C/D) is at other than digit-13.
    ② Price check digit (PC/D) cannot be calculated. (Price is other than 4 or 5 digits.)
    ③ Price is not set serially beginning from P1 to P4, or P1 to P5).
    ④ Weight is not set serially beginning from W1 (W1 to W5).

3. The usable keys to set the column are as follows:

FLAG	$\boxed{0}$ ~ $\boxed{9}$
PLU #	$\boxed{1}$ ~ $\boxed{6}$
UPC#	$\boxed{1}$ ~ $\boxed{6}$
PC/D	$\boxed{1}$
PRICE	$\boxed{1}$ ~ $\boxed{6}$
WEIGHT	$\boxed{1}$ ~ $\boxed{6}$
C/D	$\boxed{1}$

4. Digits and display of PLU#

    PLU #   1 2 3 4 5 6
             ↓ ↓ ↓ ↓ ↓ ↓
    Display H H H H H H
             1 2 3 4 5 6

5. Digits and display of UPC#

    UPC #   1 2 3 4 5 6
             ↓ ↓ ↓ ↓ ↓ ↓
    Display C C C C C C
             1 2 3 4 5 6

6. Digits and display of price

    PLU # $ 1 2 . 3 4
            ↓ ↓   ↓ ↓
    Display P P   P P
            1 2   3 4

    $ 1 2 3 . 4 5
      ↓ ↓ ↓   ↓ ↓
      P P P   P P
      1 2 3   4 5
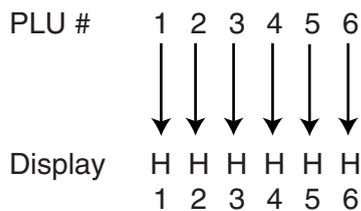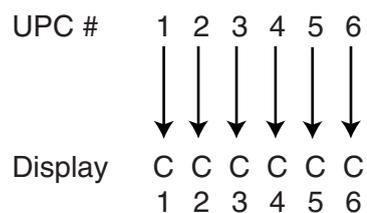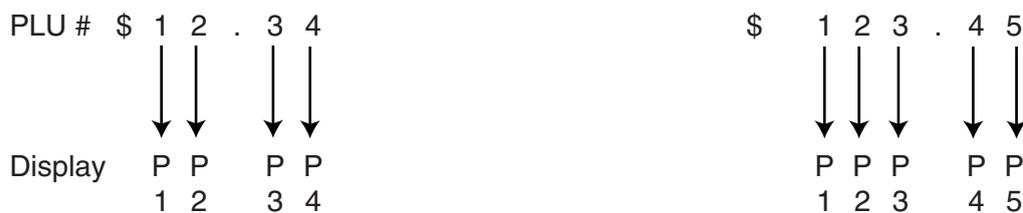
7. Display of weight Digits

    Weight 1 2 . 3 4 5 lb
            ↓ ↓   ↓ ↓ ↓
    Display W W   W W W
            1 2   3 4 5

    Weight 1 2 . 3 4 5 kg
            ↓ ↓   ↓ ↓ ↓
    Display W W   W W W
            1 2   3 4 5

8. Setting Items

         1   2   3   4
        Flag ─────────→ PLU# ─────────→ UPC# ─────────→ PC/D
         ↑   ↓
        C/D   ←───────── Weight ←────────────────────────── Price
         7   6   5
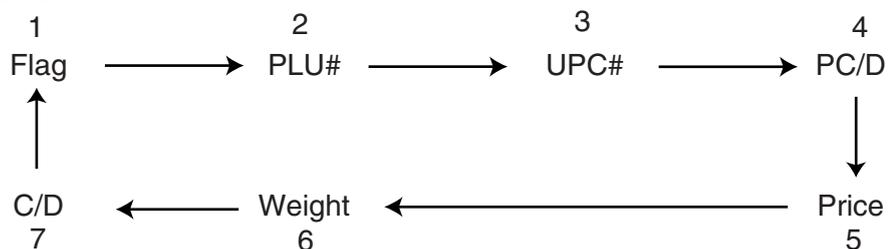
11.16 TITLES

Menu Group: 2
Item No.: 7

You can register and change displayed/printed titles of the additional information area for nutrition facts using the following procedure. Registered or changed title are stored in the RAM. When ALL clear or RAM clear is executed, these titles will be cleared and the initial titles will resume. Before starting this operation, set the initial setting #7-3 to 1.

```
┌─────────┐   ┌───┐   ┌──────────────┐   ┌───────┐   ┌──────────────┐   ┌───────┐        ┌───────┐   ┌─────────┐
│ <MENU>  │   │ 7 │   │Enter the title #.│   │ ENTER │   │Enter the title.│   │ ENTER │        │ PROG. │   │ <MENU>  │
│ Group 2 │   │   │   │ (See NOTE.)   │   │       │   │ (See NOTE.)   │   │       │        │       │   │ Group 2 │
└─────────┘   └───┘   └──────────────┘   └───────┘   └──────────────┘   └───────┘        └───────┘   └─────────┘

                                                                                         ┌───────┐      Main
                                                                                         │ ESC.  │    <MENU>
                                                                                         └───────┘
```
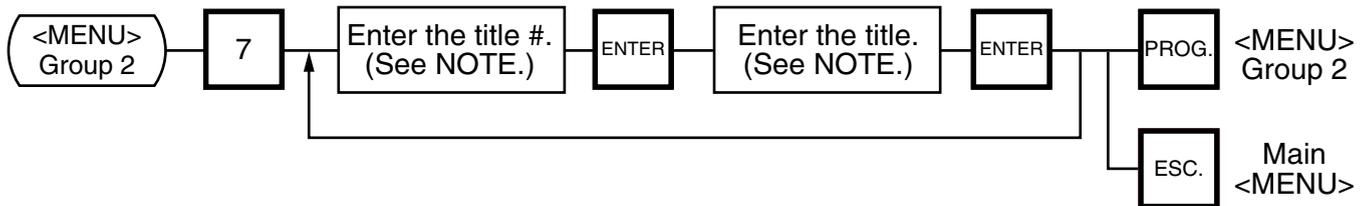
NOTE: *Title No. and format of the additional information area*

Item	Title No.	Format
Additional 1	221	Max. 22-character title
Additional 2	231	Max. 19-character title :mg or g
Additional 3	232	
Additional 4	233	
Additional 5	234	
Additional 6	235	
Additional 7,8	238	Max. 10-character title Max. 10-character title Space
Additional 9,10	239	
Additional 11,12	240	(Two different titles can be set in one area)

11.17 TRANSFERRING LOGO DATA

Menu Group: 2
Item No.: 8

Logo data is created on a PC and stored into RAM through the CMT interface. Two different sizes of logos, 320x118 dots and 256x64 dots, are available on the SL-9000 series. 64KB of RAM area is secured for logo data, in which the maximum of 13 logos (320x118 dots) or 26 logos (256x64 dots) can be stored. Before starting the following operation, set the initial setting #10-7 to 1.
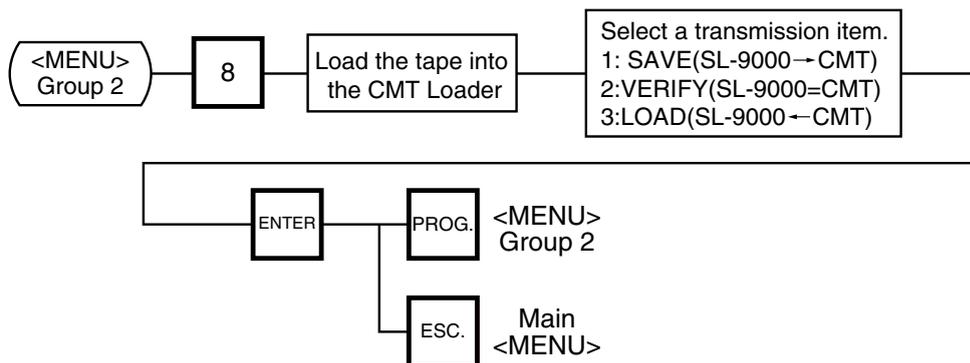
NOTE: Two sizes of logos are printed differently as follows:
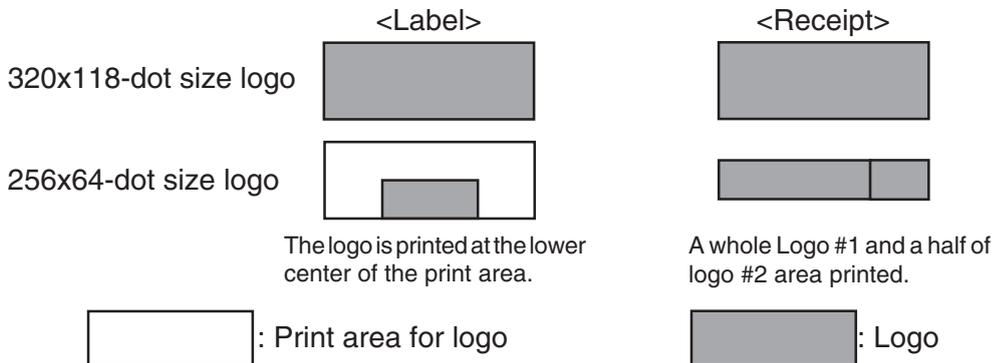
■ Table 6: Error message during data transmission

Error message	Cause	Error position	
		Header text	Data text
TIME OUT ERROR	Timeout	○	○
DATA ERROR	Incorrect segment	○	○
	Incorrect logo size	○	
	Incorrect number of logos	○	
	Incorrect logo number		○
	Incorrect number of dots to be printed.		○
	Parity error	○	○
	Framing error	○	○
	Overrun error		○

11.18 IDIOM SETTING

Menu Group: 2
Item No.:   9

Up to 50 terms frequently appearing in ingredient messages can be preset using the following procedure. The idiom number must be set from 1 to 50 in order. One idiom can contain a maximum of 20 characters.

```
┌─────────┐       ▽ r      ┌──────────────┐   ┌───────┐
│ <MENU>  │──┌───┐──       │ Set an idiom #.│   │ ENTER │
│ Group 2 │  │ 9 │         │ (#1~50)        │   │       │
└─────────┘  └───┘         └──────────────┘   └───────┘
                                                    │
   ┌─────────────────┐   ┌───────┐   ┌───────┐ <MENU>
   │ Enter  an idiom.│   │ ENTER │   │ PROG. │ Group 2
   │ (Max. 20 charas.)│   │       │   └───────┘
   └─────────────────┘   └───────┘   ┌───────┐  Main
                                     │ ESC.  │  <MENU>
                                     └───────┘
                                          ▷ r
```
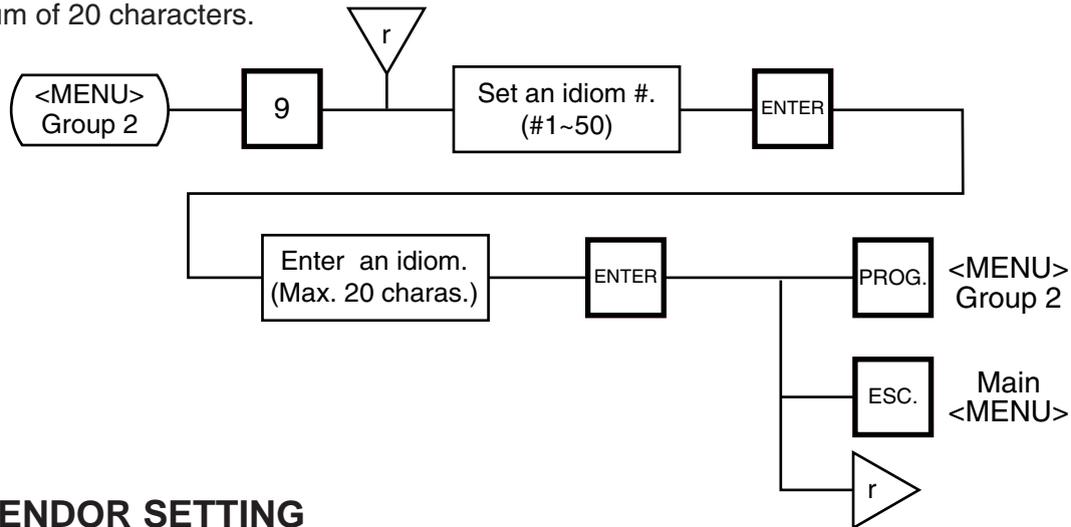
11.19 VENDOR SETTING

Menu Group: 3
Item No.:   0

Up to 40 vendors can be registered using the following procedure. The vendor number must be set from 0 to 39 in order. One vendor name can contain a maximum of 12 characters.

```
                    ▽ s
┌─────────┐       ┌──────────────────┐   ┌───────┐
│ <MENU>  │──┌───┐│ Set a vendor number.│   │ ENTER │
│ Group 3 │  │ 0 ││ (#0~39)           │   │       │
└─────────┘  └───┘└──────────────────┘   └───────┘
                                              │
   ┌──────────────────┐   ┌───────┐   ┌───────┐ <MENU>
   │ Enter  a vendor name.│ │ ENTER │ │ PROG. │ Group 3
   │ (Max. 12 charas.)   │ └───────┘ └───────┘
   └──────────────────┘              ┌───────┐  Main
                                     │ ESC.  │  <MENU>
                                     └───────┘
                                          ▷ s
```
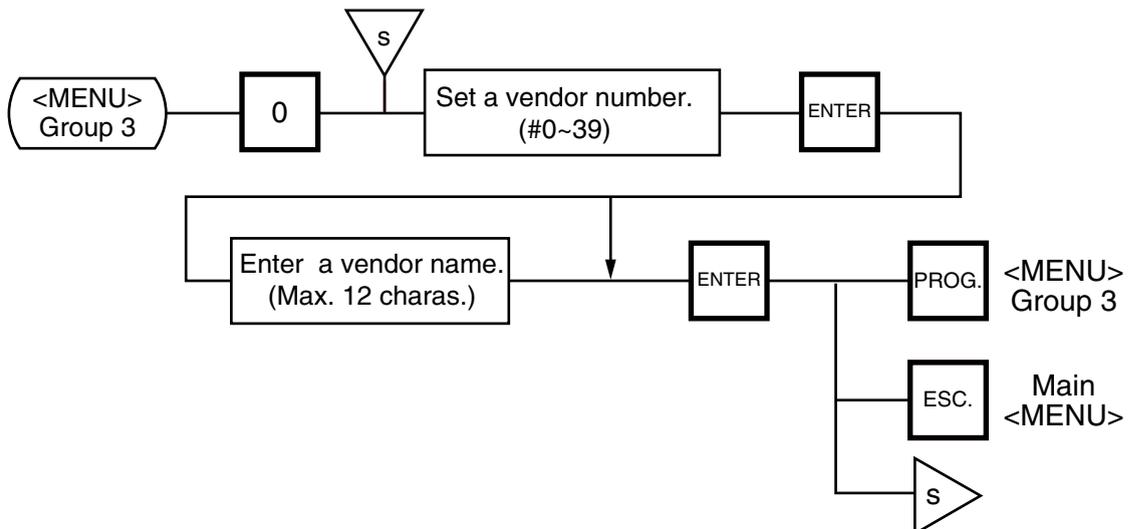
• **Deleting a vendor number**

```
                                     ┌───────┐ <MENU>
                                     │ PROG. │ Group 3
                                     └───────┘
┌─────────┐   ┌───┐ ┌────────┐ ┌──────────────┐ ┌───────┐ ┌───────┐  Main
│ <MENU>  │───│ 0 │─│ DELETE │─│ Enter a vendor│─│ ENTER │─│ ESC.  │  <MENU>
│ Group 3 │   └───┘ │ PLU    │ │ number.       │ └───────┘ └───────┘
└─────────┘         └────────┘ └──────────────┘
```
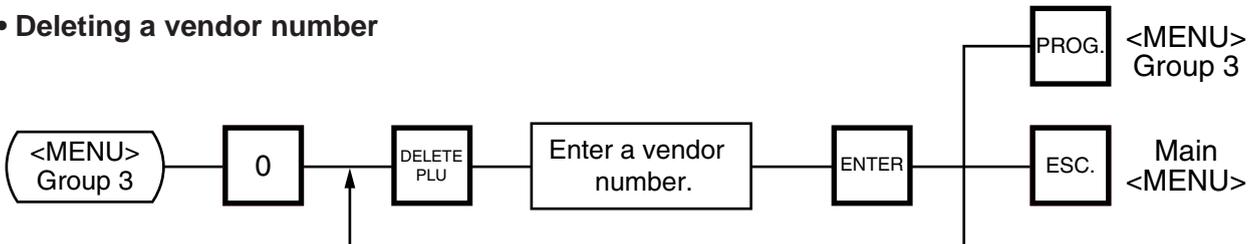
11.20 FREE FORMAT SETTING

Menu Group: 3
Item No.:   1

When using 57-mm wide labels, up to three print formats can be changed freely. Moreover, characters can be rotated and magnified, and print items are salectable.
Enter the coordinate of each print item's lower left corner using the lower left corner of a label as the origin. When a print item is located beyond the label width, an error will occur.

Key functions
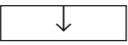
① ↓ : Moves downward (Data is stored.)
② ENTER : Moves downward (Data is stored.)
③ ↑ : Moves upward (Data is stored.)
④ → : Moves to the right
⑤ ← : Moves to the left
⑥ ◇ : Selects a setting
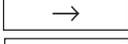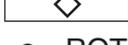
a. ROT (Rotation) :

Liquid Crystal Display

0
↓
90
↓
180
↓
270

0R
90R
180R
270R
Printing Item

b. MAG (Magnification) :

0: normal
1: X2 (width)
2: X2 (height)
3: X4 (width: X2, height: X2)

Liquid Crystal Display

0M
1M
2M
3M
Printing Item

c. PRT (Print) :

ON
↓
OFF

Liquid Crystal Display

ONP
OFFP
Printing Item

<MENU> Group 3 — 1 — t

1
Select data format

↓ or ENTER
↑

Select a print item to be re-located. — Change the coordinate. (See NOTE 5) — TEST Tset print — PROG. <MENU> Group 3

ESC. — Main <MENU>

t
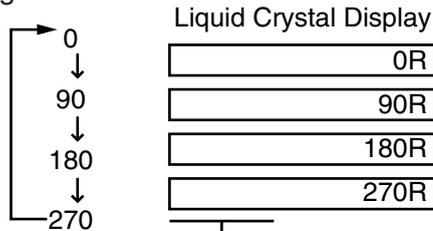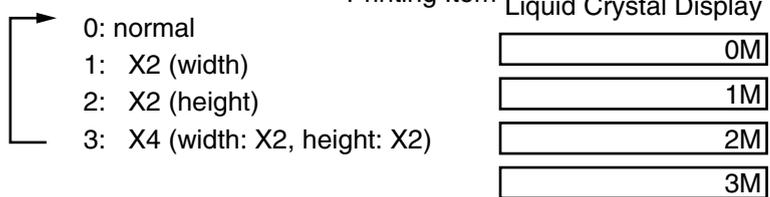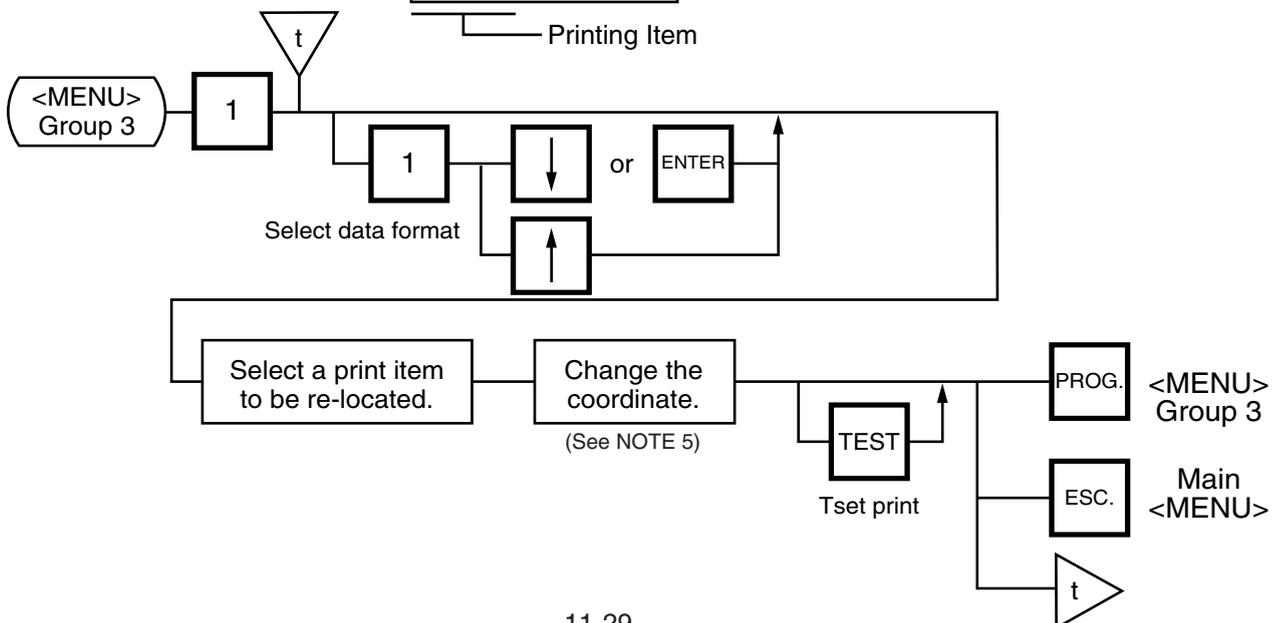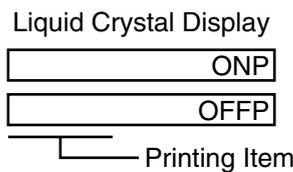
NOTES: 1. *The following print items cannot be magnified.*
          ① *LOGOs*
          ② *Safe handing precautions*
          ③ *Ingredient messages*
          ④ *Bar code*

      2. *The following items cannot be rotated.*
          ① *LOGO*
          ② *Safe handling precautions*
          ③ *Bar code*

      3. *Base label format numeric data is shown automatically.*
          X coordinate: *0-383 dots (1 dot = 0.132 mm)*
          Y coordinate: *0-1300 dots (1 dot = 0.154 mm)*
        Format data beyond the effective print area results in an error.

      4. *Each format data must be set in the following range:*
          ① *Free Format# (FREE FMT#): 1-3 (Free format# 1-3 correspond to the label format 41-43 or #91-93.)*
          ② *Base label format (BASE LBL#): 57-mm wide label*
             On-demand: *10, 11, 13, 15, 16, 21, 23, 25, 26, 31, 33, 35 and 36*
          ③ *Length:*   *30-200 mm*
          ④ *Number of ingredient message lines:*   *0-38 lines*
          ⑤ *Bar code height: 0-39 mm*

      5. *Each print item should be printed in the following range.*

No.	Print Item	Print area size				Note
		Normal		Rotation		
		X	Y	X	Y	
1	Commodity name (4 line)	384	94	94	416	
2	Ingredient	384	*1	*1	438	*1. Line count x 15 dots
3	Packed ON	84	20	20	92	
4	Packed ON (title)	70	13	13	78	
5	Sell BY	84	20	20	92	
6	Sell BY (title)	70	13	13	78	
7	Weight	106	20	20	112	
8	Weight (title)	105	13	13	112	
9	Unit price	140	20	20	147	
10	Unit price (title)	105	13	13	112	
11	Price	138	32	32	147	
12	Price (title)	105	13	13	112	
13	Barcode	212	*2			*2. height/0.154 (dot)
14	Mark (M/R)	12	20	20	12	
15	Tare	100	20	20	107	
16	Tare (title)	34	13	13	38	
17	SP-INFO/NET WT	384	48	48	416	
18	Relish	84	20	20	92	
19	Relish (title)	232	14	14	252	
20	LOGO	320	118			
21	Safe Handling	384	194			
22	Address	384	32	32	416	

No.	Print Item	Print area size				Note
		Normal		Rotation		
		X	Y	X	Y	
23	(F) Prince	138	32	32	146	
24	(F) Price (title)	105	13	13	120	
25	(F) Unit price	140	20	20	147	
26	(F) Unit price (title)	105	13	13	120	
27	(F) Weight	106	20	20	112	
28	(F) Weight (title)	105	13	13	120	
29	(F) Price	138	32	32	146	
30	(F) Price (title)	105	13	13	120	
31	(F) LOGO	320	118			

When setting the print item positions (X and Y), an error will occur in the following cases.
① Entered "X" point + Print size "X" > 384 dots.
② Entered "Y" point + Print size "Y" > 1301 dots.
Magnified print items become double in size.

6. When pressing the ⎡TEST⎤ key, the printer issues a test label.

7. Rotated data will be printed so that the lower left corner is positioned at the designated coordinate.

(1) 0°   (2) 90°   (3) 180°   (4) 270°
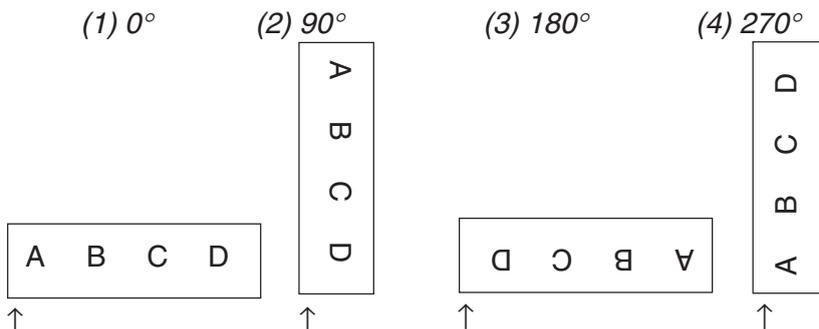
The points indicates by the arrows are the designated coordinates.

8. Print coordinate
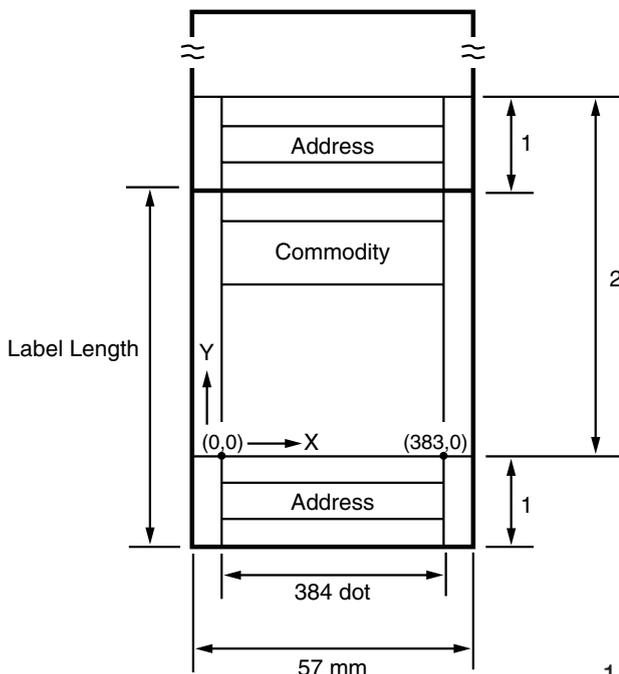
*1 Address are printed together with the previous label's data. To print addresses, use normal labels.
POS (Format #10-16): 10.0 mm
NET (Format #21-26): 10.0 mm
Bar code (Format #31-35): 8.5 mm

*2 Free format area

11-31

■ Available format and print items for free format

Print Item	Format Data	Description
FREE FMT#		FREE FORMAT NUMBER
BASE LBL#		BASE LABEL NUMBER
LENGTH /mm	Refer to NOTE 4, page 11-30	LABEL LENGTH
CT. LINE/ING		NUMBER OF INGREDIENT LINES
H. BCODE /mm		BARCODE HEIGHT

Print Item	Print Area Size		ROT (Rotation)	MAG (Magnification)	PRT (Print)	Description
	X	Y				
COMMODITY	○	○	○	○	○	COMMODITY NAME
INGREDIENT	○	○	○	X	○	INGREDIENT MESSAGE
PACKED ON	○	○	○	○	○	PACKED ON DATE
(T) PACKED	○	○	○	○	○	TITLE OF PACKED ON DATE
SELL BY	○	○	○	○	○	SELL BY DATE
(T) SELL BY	○	○	○	○	○	TITLE OF SELL BY DATE
WEIGHT	○	○	○	○	○	WEIGHT
(T) WEIGHT	○	○	○	○	○	TITLE OF WEIGHT
U. PRICE	○	○	○	○	○	UNIT PRICE
(T) U. PRICE	○	○	○	○	○	TITLE OF UNIT PRICE
PRICE	○	○	○	○	○	TOTAL PRICE
(T) PRICE	○	○	○	○	○	TITLE OF TOTAL PRICE
BARCODE	○	○	X	X	○	BARCODE
ADDRESS	○	○	○	○	○	ADDRESS
TARE	○	○	○	○	○	TARE
(T) TARE	○	○	○	○	○	TITLE OF TARE
RELISH	○	○	○	○	○	COOKED BY DATE
(T) RELISH	○	○	○	○	○	TITLE OF COOKED BY DATE
S. INF/N. WT	○	○	○	○	○	SPECIAL INFORMATION or NET WEIGHT STATEMENT
MARK (M/R)	○	○	○	○	○	MARK OF MARK DOWN or REWRAP
LOGO	○	○	X	X	○	LOGO
S. HANDLING	○	○	X	X	○	SAFE HANDLING INSTRUCTION

○ : Available

X : Not available

For the print area size, refer to NOTE 5 on page 11-30.

12. PROGRAMMED DATA VERIFICATION REPORTS

The programmed data can be printed on journal paper. Before issuing these reports, load the journal paper. The programmed data verification reports cannot be issued with any label. The keys to be used in the following procedures are those on the numeric key pad, which is framed in black in the figure on page 5-1, but not on the programming keyboard.

■ How to access the READ menu

Press the ESC. key to access the following display. Enter "5", and the scale will enter the READ menu. If the READ menu is protected, enter "5" and a password. (Refer to section 13)

Liquid Crystal Display

READ	5

Menu: READ

Set the table menu #.			
PLU programmed data	5	0	u → (See the next page)
Commodity description	5	1	u →
Speed key programmed data	5	2	
Grade lines	5	3	u
Vendor name	5	4	
Idiom	5	5	
	5	6	

PRT / *
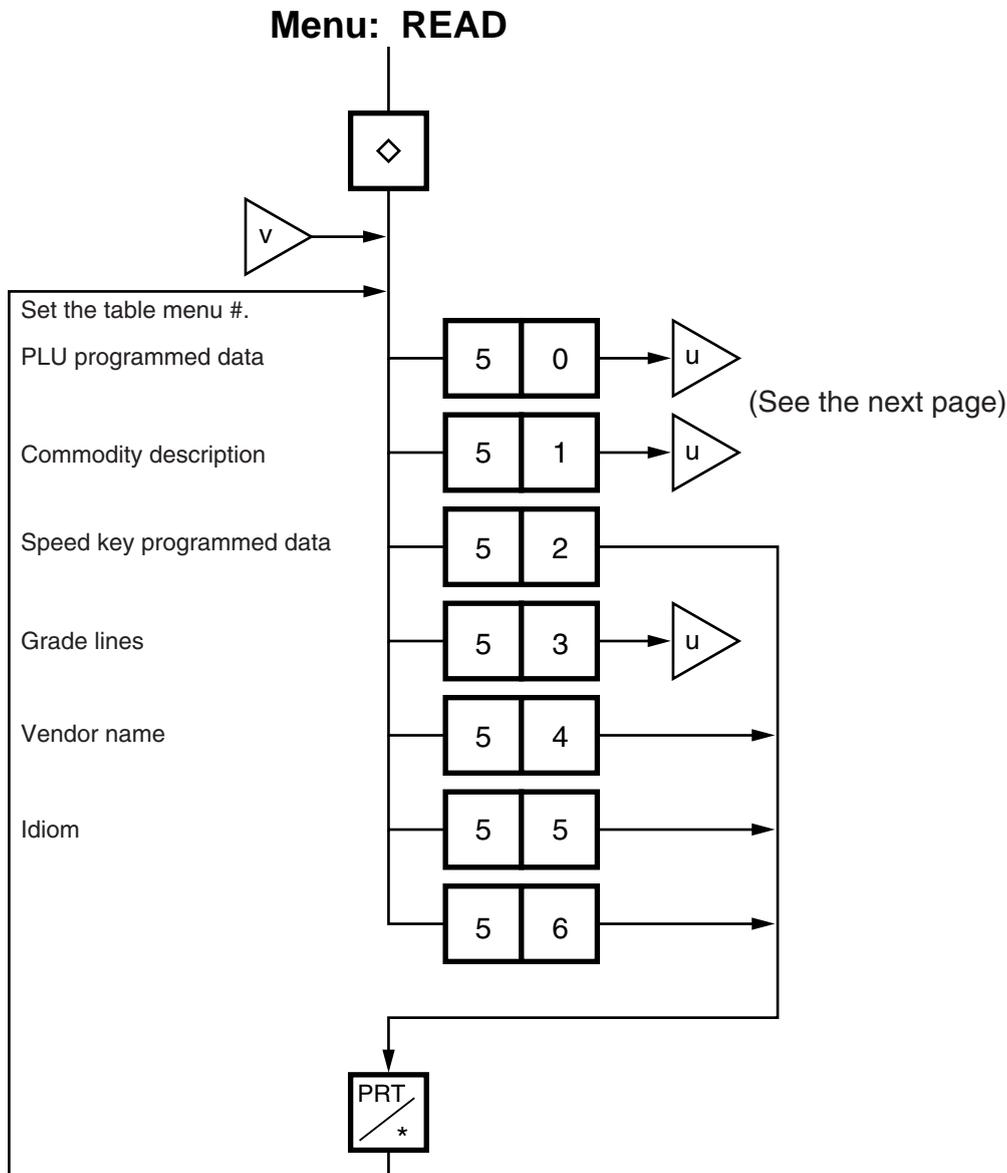
Table 7

Menu #	Report Name	Contents
50	PLU programmed data report	All the preset PLU data are listed in the PLU # order (from small to large #).
51	Commodity description report	All the preset commodity names are listed in the PLU # order (from small to large #).
52	Speed key programmed data report	The PLU # and the commodity name preset on each speed key is listed.
53	Commodity and ingredient description report	All the presets commodity names and ingredient messages are listed in the PLU # order (from small to large #).
54	Grade line report	All the preset grade line contents are listed.
55	Vender name report	All preset vendor names are listed.
56	Idiom report	All preset idioms are listed.

• Set the data range of each programmed data verification report

Set the individual PLU #.

Set the individual PLU #. (Ex. PLU #100)

Set the block PLU #. (Ex. PLU #30 ~ 39)

Set the zone PLU #. (Ex. PLU #100 ~ 108)
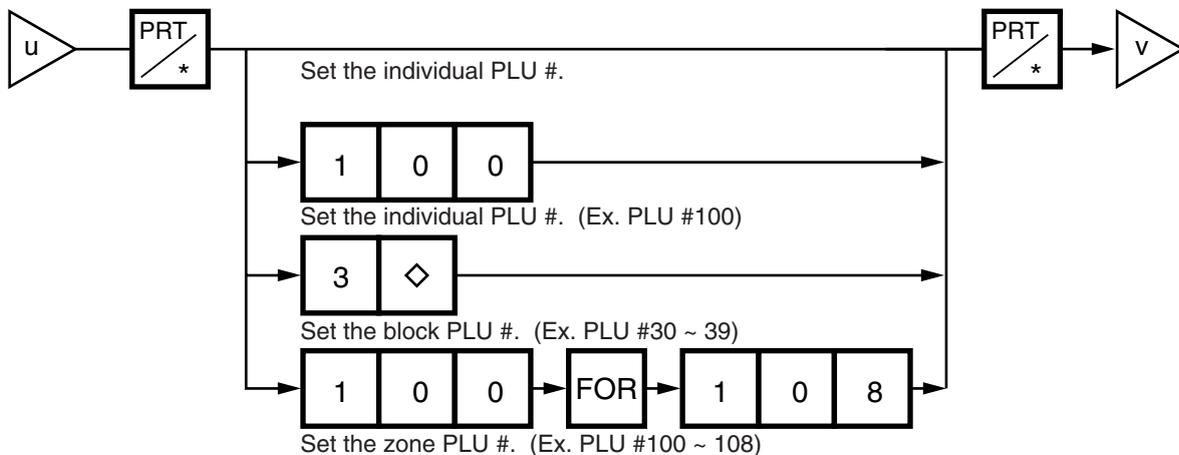
13. PASSWORD SECURITY

You can protect all menus (except REG. menu) and set two step passwords for access to protected menus.

13.1 SETTING PASSWORD AND PROTECT MENU

Liquid Crystal Display

PROG.	0
REG.	1
MARK DOWN	2
REWRAP	3
SECURITY	4
READ	5
RESET	6

Select menus to be protected.
Remote display

WEIGHT	UNIT PRICE	TOTAL PRICE
1 0	0 0 0	- 0

P   M R   S   X Z

0: Protected (Accessible with a password entry)

-: Unprotected

Enter password A as 4 digits.

Exclude menus the password A cannot access.
Remote display

WEIGHT	UNIT PRICE	TOTAL PRICE
1 1	0 0 1	- 0

P   M R   S   X Z

0: Valid

1: Invalid

-: Unnecessary
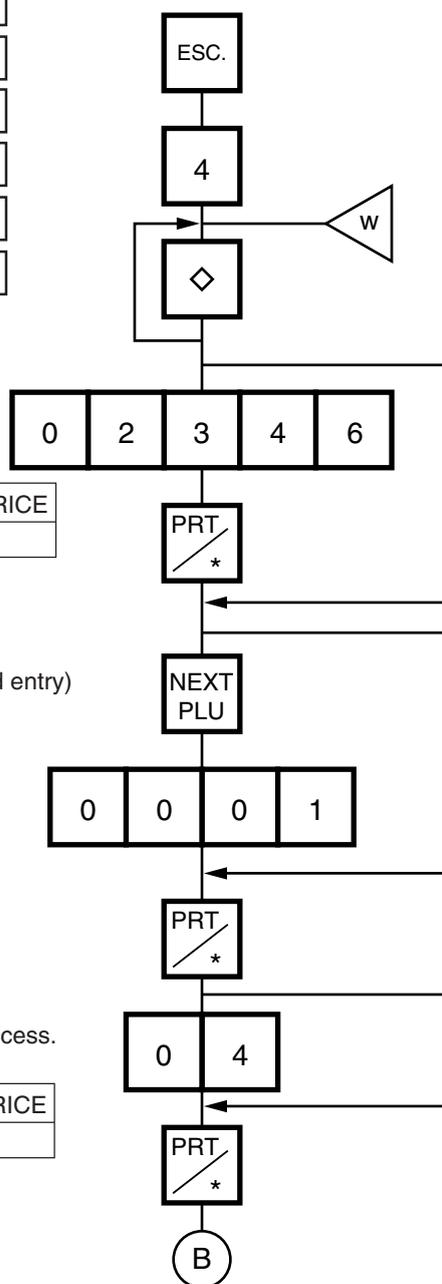
The following numeric keys represents each menu. Enter the following numbers when selecting menus to be protected.

Note that REG. menu (1) cannot be protected.

0 : P (PROG. Menu)

2 : M (M. DOWN Menu)

3 : R (REWRAP Menu)

4 : S (SECURITY Menu)

5 : X (REPORT Menu)

6 : Z (RESET Menu)

ESC.

4

w

◇

0	2	3	4	6

PRT / *

NEXT PLU

0	0	0	1

PRT / *

0	4

PRT / *

(B)

13-1

Enter password B as 4 digits.

Exclude menus the password B cannot access.
Remote display

WEIGHT		UNIT PRICE		TOTAL PRICE
1	1	1 0	1	- 1

P M R   S X Z

0: Valid
1: Invalid
-: Unnecessary
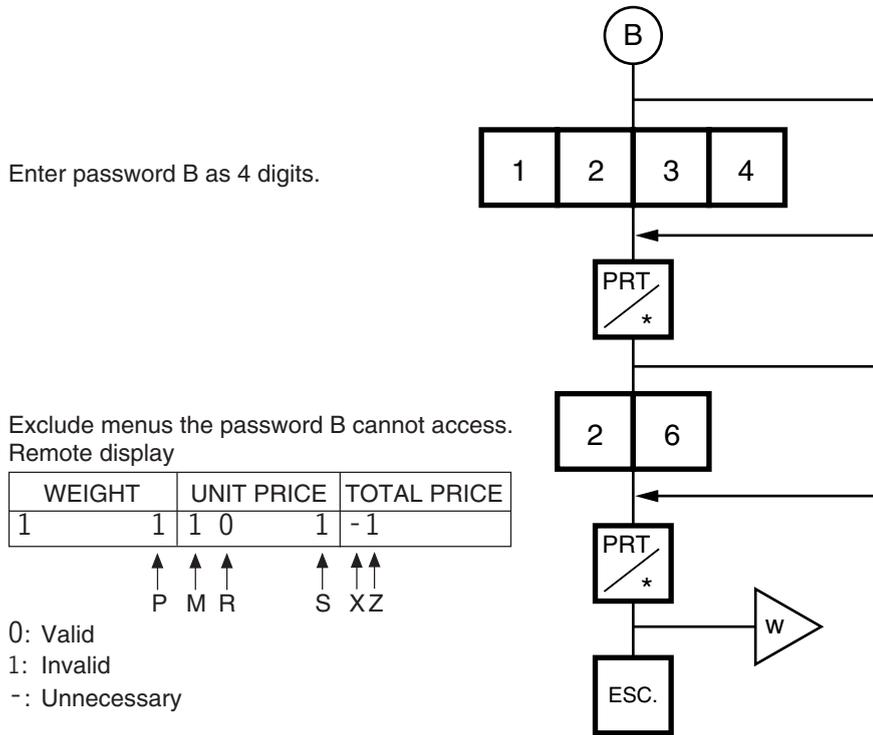
NOTES: 1. Select validity of the password by pressing the ◇ key.

2. When the same password is entered for password A and B, password A has priority over the password B.

3. Be careful if you exclude the same menu from the accessible menus with both password A and B, as you will not be able access the menu.

13.2 CALLING MENU BY ENTERING PASSWORD

Liquid Crystal Display

PROG.	0
REG.	1
MARK DOWN	2
REWRAP	3
SECURITY	4
READ	5
RESET	6

```
                    ┌──────┐
                    │ ESC. │
                    └──────┘
                        │ ◄──────────────────────────────────┐
            ┌───────────────────────┐                        │
            │ Enter a menu No.      │                        │
            │ [0] ~ [6]             │                        │
            └───────────────────────┘                        │
                        │        Accessible with the password │
    Accessible          │                                     │
    without the   ┌─────────┐                    ┌──────┐     │
    password      │ 1  (REG.)│        NEXT       │ NEXT │ or │VOID│
                  └─────────┘        PLU          PLU
                        │ ◄──────────────────────────┐
            ┌─────┐ ┌─────┐    ┌─────┐         ┌──────┐
            │  0  │,│  2  │ ~  │  6  │         │ PRT  │
            └─────┘ └─────┘    └─────┘         │  /*  │
    Non protect menu                           └──────┘
    ◄─────────────────                             │
                        │  Protect menu ◄───────────┘
        ┌───┐  ┌──────────────────────────┐
        │ C │  │ Enter the 4-digit Password.│
        └───┘  └──────────────────────────┘
                        │                    ┌──────┐
                        │                    │ ESC. │──────►
                   ┌──────┐                  └──────┘
                   │ PRT  │
                   │  /*  │          Password NG
                   └──────┘    ──────────────────────────────►
                        │  Password OK
    Accessible menu with the password
    ◄───────────────────────
                        │
                        ▼
                   Operation
```
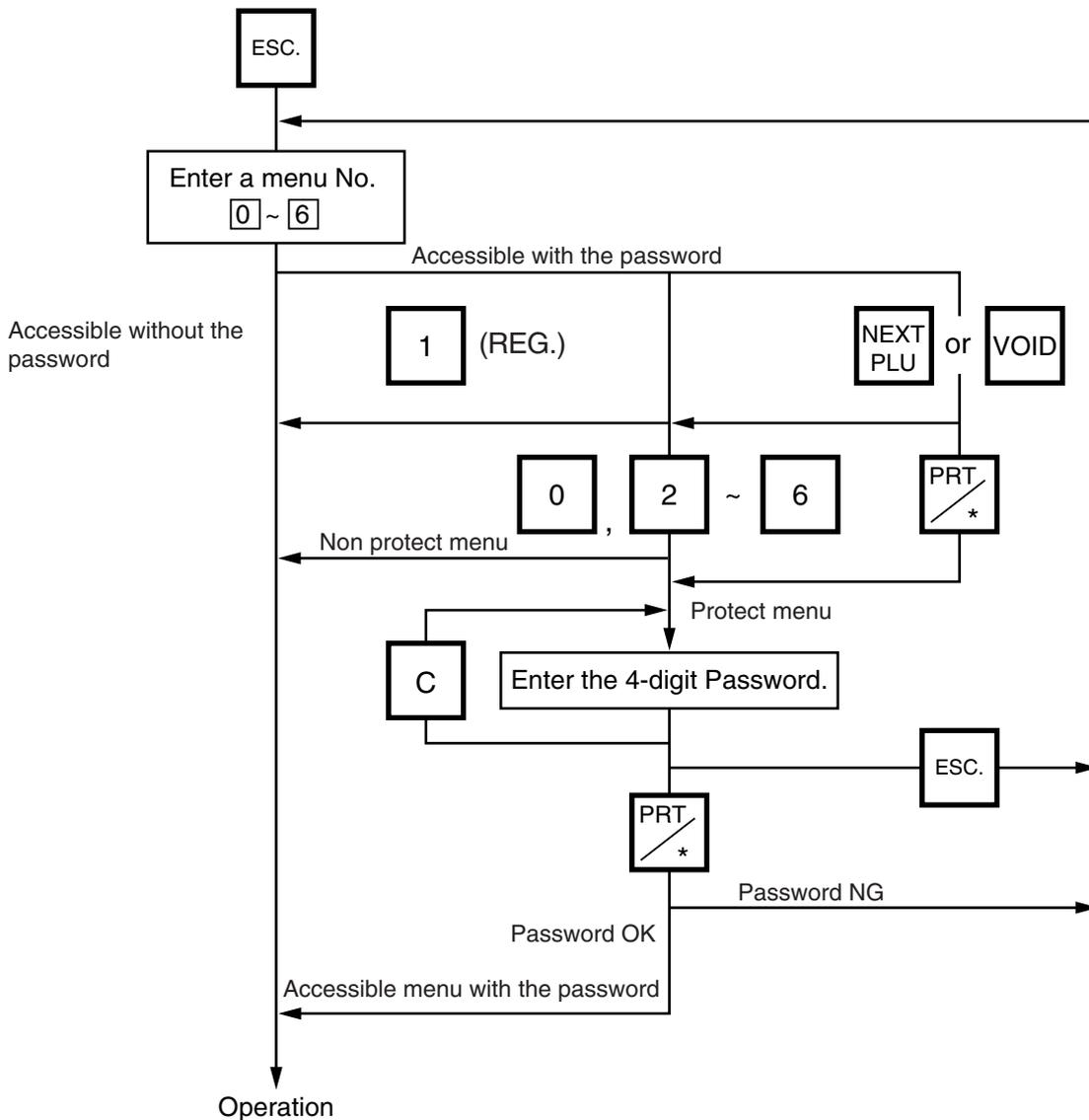
NOTE: *When the password is unknown, enter "HELP" instead, and you can access only security menu.*

14. OPERATING PROCEDURES

■ NOTES BEFORE STARTING OPERATION

(1) Insert the power plug into the AC outlet and turn the power ON.

(2) A sixteen-second scanning will be performed after pressing the $\boxed{\text{POWER}}$ key.

(3) Do not move the scale while it is in operation. Should it become necessary to move it at any time, turn the power switch to the OFF position and be sure to reajust the level indicator after relocating the scale.

(4) Should a power failure occur during operation, remove the commodity from the platter and insert the power plug into an AC outlet again when power is restored.

(5) If the scale is used with an unrated power source, inaccurate scaling or other errors may occur.

(6) If the zero point has shifted during scaling, and no tare is displayed, adjust the zero point by depressing the $\boxed{\text{ZERO}}$ key.

(7) Check the date of the scale before operation every day.

(8) Make a test print before operation every day.
Press the $\boxed{\text{TEST}}$ key, and the test label is issued.

■ How to access the REG., M.DOWN, or REWRAP menu

The following display is the REG. menu display. When this display is shown after pressing the $\boxed{\text{POWER}}$ key, you can start the REG. operation right away.

Remote Display

WEIGHT	UNIT PRICE	TOTAL PRICE
0.000	P	000000

▼
REG

Liquid Crystal Display

ENTER THE PLU #

To access a menu from other menus, press the $\boxed{\text{ESC.}}$ key to show the Main menu and enter the menu No. When the M.DOWN and REWRAP menus are protected, enter the menu No. and then the password.

Liquid Crystal Display

REG.	1
MARK DOWN	2
REWRAP	3

14.1 WEIGHING OPERATION

Menu: REG., M. DOWN, or REWRAP
Mode: WEIGH

The weigh mode is used to weigh a commodity and to issue the label. The label contains data such as a weigh, unit price (price per weight) and total price (calculated as a result of the weighing operation).
The following is a basic operation seen at the sales floor of a store or at a back room where different kinds and weights of commodities are repacked. Pressing the |VOID| key subtracts the last entry from the memory.

Example) When PLU #100 and an unit price of $8.00 are set in the speed key #12.

Enter the PLU #. [1][0][0]

|LB/kg| The unit of measure can be changed for CA model only.
LB ↔ kg

Press: [PLU]   Press the speed key. [12]

Available only when the initial setting # 5-6 is set to 1.

Remote Display

WEIGHT	UNIT PRICE	TOTAL PRICE
1.000	8.00	8.00

▼ REG

kg scale   lb scale

[100 g] [1/4] [1/2]

Liquid Crystal Display   [T-BONE STEAK]

Place a commodity on the platter. (Ex. 1.000 lb.)

MANUAL: [PRT/*]   : AUTO

The label is issued.

Press when canceling the last sales. [VOID]

T-BONE STEAK

PACKED ON DEC 28
SELL BY   JAN 2

2 11111 508006

1.000   8.00 $8.00
NET WT. lbs   PRICE lb $ TOTAL PRICE $
TEC STORE
(TEL) 0123-45-6789

(Sample label)

NOTES:
1. Pressing a speed key to which no PLU data has been assigned will result in an error. In this case, press the [C] key, then press a speed key to which PLU data has been assigned.
2. To change between AUTO and MANUAL, follow the procedure provided in section 14.9.
3. If a unit price exceeding 4 digits is obtained by multiplying by 2 or 4 (when pressing the [1/2 lb] key or [1/4 lb] key), the unit price will be 0.
4. [100 g] key is available only when the scale is a kg scale or operated on kg base.
   This key, however, has no function on the AU type.
5. When the [1/2 lb], [1/4 lb] or [100 g] key is pressed, the unit price will change on the display.
   The [100 g] key, however, has no function on the AU type.
6. When the "compulsory tare" is selected, a tare must be subtracted in a weighing operation, otherwise an error message "TARE REQUIRED" will be displayed when the following operation has been done:
   ① Manual mode: Pressing the [PRT/*] key
   ② Auto mode: Placing a commodity on the platter.
   ③ Floating vendor mode: Pressing the [Vendor] key.
   When a "TARE REQUIRED" is displayed, refer to Section 14.6 to follow the proper weighing procedure.

14.2 FIX PRICE OPERATION (FOR US TYPE ONLY)

The FIX mode (Fix Price Mode) is used to issue a label for a commodity of a fixed price PLU (i.e. the price determined by the store), the weight of which may vary from commodity to commodity. In this mode, the Unit Price of the commodity looked up from the PLU file will be printed as the Total Price regardless of its actual weight, and the weight is also printed on the label.

Menu: REG., M.DOWN, or REWRAP
Mode: FIX

Example) In the case of PLU #636 of fixed price $3.80 which is assigned to speed key #7.

Enter the PLU #. | 6 | 3 | 6 |

Press: PLU   Press the speed key. | 7 |

Place the commodity on the scale platter.
(Ex. 1.000 lb.)

AUTO: MANUAL:

PRT / *

The label is issued.   The label is issued.

Remote Display

WEIGHT	UNIT PRICE	TOTAL PRICE
0.000		3.80

▼
REG

Liquid Crystal Display

SMOKED SALMON CH

SMOKED SALMON CHUNKS

PACKED ON DEC 28
SELL BY   JAN 7

222222 003809

1.000 $3.80
NET WT. lbs   PRICE lb $ TOTAL PRICE $
TEC STORE
(TEL) 0123-45-6789

(Sample label)

14.3 BY COUNT OPERATION

The BY-COUNT mode is used to issue the label of commodities of the same kind in a package (or may not be packed). The whole package quantity (or a certain quantity) and the whole package price (or the price per the quantity) are usually preset. Thus, it is not necessary to weigh the commodities by the scale in such cases.

Menu: REG., M.DOWN, or REWRAP
Mode: BY-COUNT

Example) In case of purchasing 10 DONUTS for $1.50 of price for 4 DONUTS. (When a price of $1.50/ 4 DONUTS is set for PLU #33.)

Enter the PLU #. → 3 3

PLU

Enter the quantity of purchase (Max. 2 digits) → 1 0

PRT / *

AUTO | MANUAL

The label is issued in succession after peeling it. | Single label is issued.

Press to suspend label issue temporarily. → C | PRT / * → Press to resume label issue.

Press to cancel label issue. → C

The display returns to the initial screen. → PLU

Remote Display

WEIGHT	UNIT PRICE	TOTAL PRICE
- - - - -	P 10	3.76

▼
REG

Liquid Crystal Display

DONUTS

DONUTS

PACKED ON DEC 28
SELL BY JAN 4
000000 000017
10 PCS   4 / 1.50 $3.76
NET WT. lbs   PRICE lb $ TOTAL PRICE
TEC STORE
(TEL) 0123-45-6789
(Sample label for US type)

DONUTS

PACKED ON DE 28
SELL BY JA 4
000000 000017
10 PIECES $3.76
NET WT. lbs   PRICE lb $ TOTAL PRICE
TEC STORE
(TEL) 0123-45-6789
(Sample label for CA and QR type)

Example) An open price item can be sold as below:

    ①   1 piece at 15 dollars

    ②   15 pieces at 10 dollars

    ③   15 pieces sold at 0.5 dollars per 10 pieces

Enter the PLU #. | 5 | 1 |

Press: | PLU |

ex.) ①

Enter quantity | 1 | 5 | Enter price | 1 | 5 |

Press: | FOR |

ex.) ③   ex.) ②

Enter quantity | 1 | 0 | Enter price | 1 | 0 |

Press: | FOR |

Enter total price | 5 | 0 |

| PRT / * |
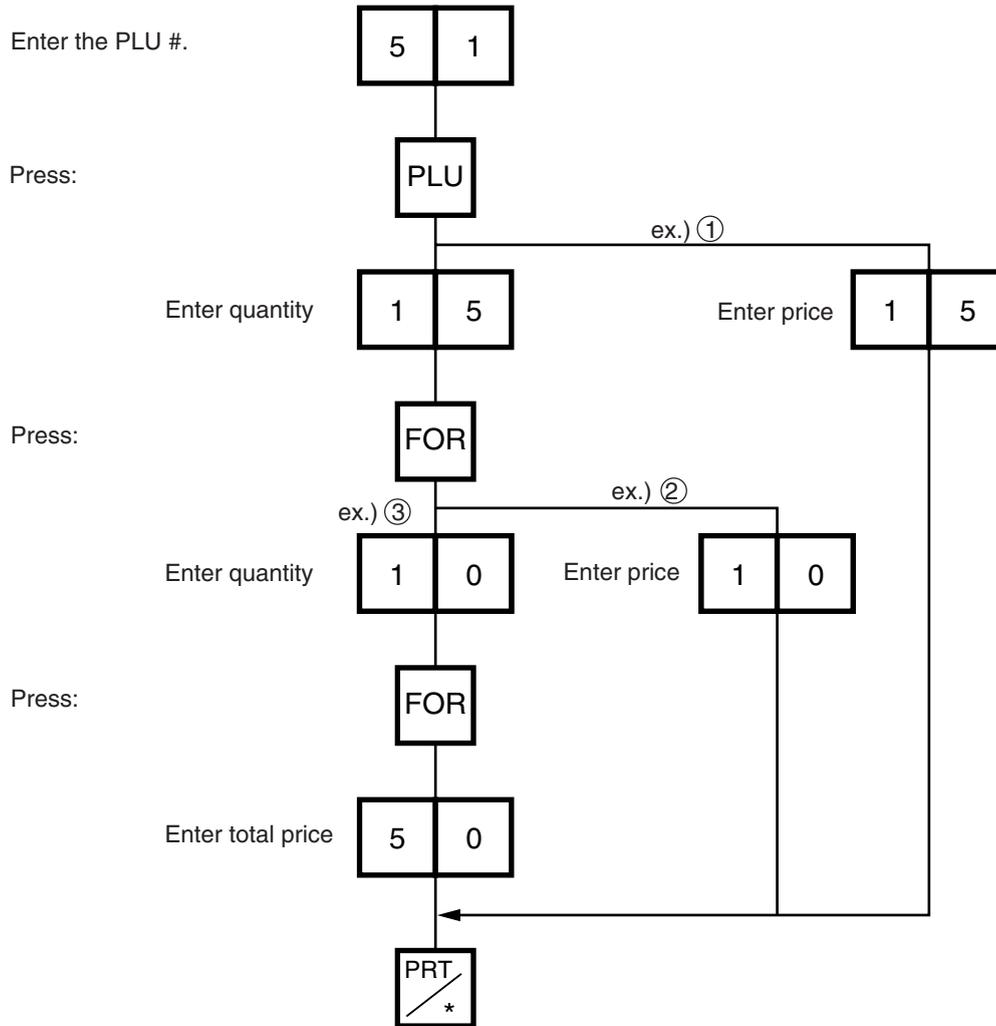
14.4 PRINT COUNT OPERATION

With this procedure, a specified number of the same labels can be issued.

Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH, FIX or BY-COUNT

Example A)   When operating in Weigh mode.

Press:	PRESET COUNT	
Set the number of labels. (Max. 99 labels)	5 0	
Press:	PRT / *	
Enter the PLU #.	3 0 9 1	C
Press:	PLU	Remove the commodity.
PLU data is saved.	SAVE	
Place a commodity on the platter. (Ex. 0.700 lb.)		Clear the preset count. C
MANUAL: PRT / * :AUTO		Press: PRT / *

Batch — The labels are issued with the backing paper attached.

On-demand — The label is issued.

When all the specified numbers of the labels are being issued.

C

NOTES: 1. *A batch issue means to print labels continuously with the backing paper attached.*
   On-demand issue means to print label one by one.

   2. *To check the remaining number, press the* PLU *and the* PRESET COUNT *keys.*

Example B)   When operating in Fix or By Count mode.

Press:

PRESET COUNT

Set the number of labels.
(Max. 99)

2 5

Press:

PRT ∗

Enter the PLU #.

1 5

Press:

PLU

[BY COUNT]

PRT ∗

Press, to save the PLU data:

SAVE   [FIX]

SPLIT PRICE operation

PRT ∗

Place a commodity on the platter.
(Ex. 1.320 lb.)

Batch   On-demand

| The specified numbers of labels are issued in succession with the backing paper attached. | The next label is issued after removing the current label. |

MANUAL :   PRT ∗   : AUTO

Suspend the batch printing.

C

Batch   On-demand

| The labels are issued with the mount paper attached. | The label is issued. |

Resume the label issue.

PRT ∗

When all the specified numbers of labels are being issued.

Remove the commodity from the platter.

When the last label is issued:

Repeat until the specified number of labels are issued, alternating the commodity placed on the platter.

Press, to clear the Preset Count.

C

Clear the preset count.

C

Press, to regain the initial status.

PRT ∗

Press:

PRT ∗

Example C) When issuing only the nutrition information label. Note that nutrition information can be printed only on several types of label. Refer to page 11-19.

Select basic data and nutrition information labels or a nutrition information label by pressing this key.

Set the number of labels. (Max. 99 labels)

Enter the PLU #.

```
        ┌──────────┐
        │ PRESET   │
        │ COUNT    │
        └──────────┘
             │     ┌──────┐
             ▼     │      │
          ┌─────┐  │
          │  ◇  │──┘
          └─────┘◄─┘
             │
             ▼
        ┌────┬────┐
        │ 9  │ 9  │
        └────┴────┘
             │
             ▼
          ┌─────┐
          │ PRT │
          │   * │
          └─────┘
             │
             ▼
        ┌────┬────┐
        │ 3  │ 9  │
        └────┴────┘
             │
             ▼
          ┌─────┐
          │ PLU │
          └─────┘
             │
             ▼
          ┌─────┐
          │ PRT │
          │   * │
          └─────┘
```
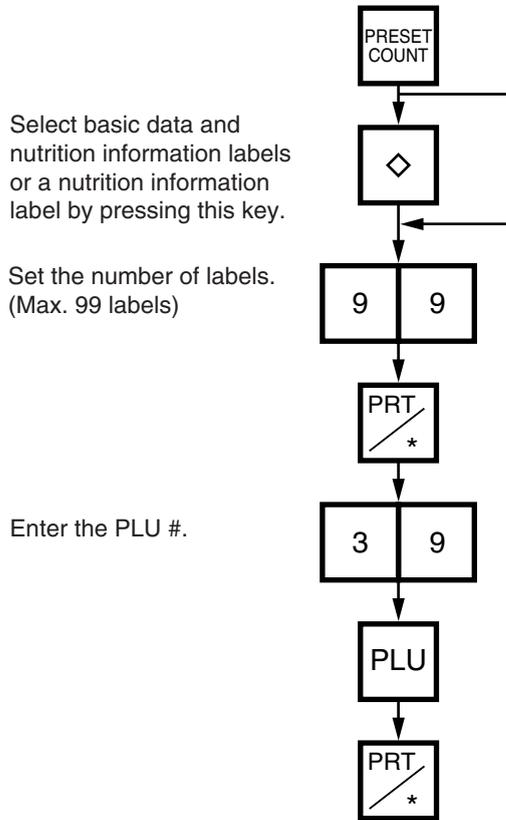
Table 8

The nutrition information labels are issued in the following methods.

Issue mode	Manual issue				Auto issue			
	On-demand		Batch		On-demand		Batch	
	Pre=0	Pre>=1	Pre=0	Pre>=1	Pre=0	Pre>=1	Pre=0	Pre>=1
Weigh	1	1	1	1	1	1	1	1
Fix (Weight/price)	1	1	1	1	1	1	1	1
Fix (Net weight)	1	1	1	1	1	1	1	2
By count	1	1	1	1	1	1	1	2

Pre : Preset count

1 : Issue method ①
    After a basic data label is issued, a nutrition information label will be issued.

2 : Issue method ②
    After the specified number of basic data labels are continuously issued, the same number of nutrition information labels will be issued. The number of labels can be specified with the preset count setting.

14.5 ISSUING LABELS WITH NET WEIGHT STATEMENT (FOR US TYPE ONLY)

Menu: REG., M.DOWN, or REWRAP
Mode: FIX
When the initial settings #1-7 and #1-8 are set to 1, a Net Weight Statement is printed on the label.
A unit price and a tare registered in each PLU are printed as a price and a net weight.

Example) The preset Price is $2.10 and the preset Net Weight is 12 oz. The store knows that the actual Net Weight of this commodity is 19 oz. and decides to sell it at $2.00.

Enter the PLU #.

8	1	6

Press:

PLU

Initial set #7-1: 0   Initial set #7-1: 1

Enter the new price.

2	0	0

Press:

PRT / *

Enter the new weight.
(unit of weight: oz
displayed in the incremental
display method, i.e., the data
is shifted to the left as each
digit value is entered.)

1	9

Initial set #7-1: 1   Initial set #1-7: 0

Press:

FOR

Enter the quantity.

3

Press:

PRT / *

AUTO   MANUAL

The label is issued. (Labels of identical print data will automatically be issued consecutively by peeling the label off the backing paper.)

The label is issued.

C

C

PLU

Press, to cancel label issue temporarily.

Press, to cancel label issue.

Press, to return the PLU data to the PLU file.

NOTES:
1. To print NET WT. data. from the FIX mode, load a label which has an area to print a NET WT Statement.
2. The quantity sold number and price data in NET WT. statement operation will be accumulated in the memory. No weight data will be accumulated.
3. The position of the decimal point is adjustable and a comma or period is selectable by the initial setting.
4. Weight data is shifted to the left.
5. Weight data exceeding 480 oz results in an error.
6. Unit price calculation system
   (Step 1) Weight data is calculated from royal lb into decimal lb.
   (Round off the data to two decimal places.)
   ex.) 21 oz → 1.3125 lb → round → 1.31 lb
   (Step 2) Price is divided by the value obtained above.
   (Round off the data to two decimal places.)
   ex.) 1.5$/1.31 lb = 1.145 → round → $1.15/lb
   This data is printed.
7. When the unit price is less than $0.01/lb or either the weight or price is 0, the unit price will not be printed.
8. Multiplication registration of NET WT statement
   The maximum quantity, of a commodity is 99.
   In the following cases, an error occurs when pressing the PRT/* key to issue the label.
   (1) Quantity = 0
   (2) Price x quantity > max. price
   Weight x pieces > max. tare (30 lb scale: 480 oz, 15 Kg scale: 9.995 Kg)

LEMON MERINGUE PIE

PACKED ON DEC 28   SELL BY   JAN 2

1 PIECES $2.00
                              TOTAL $

NET WT. 19 OZ(539 g)

200003 202009

(Sample label)

14.6 TARE/SAVE FUNCTION PROCEDURES

Menu: REG., M.DOWN, or REWRAP

Mode: WEIGH or FIX (Tare % function is available in WEIGH mode only.)

There are two kinds of tare subtraction procedures, one is "Direct tare", the other is "Preset tare". The ⎍SAVE⎍ key is used to save the tare, unit price, and PLU data after taking a commodity from the platter.


NOTES:
1. Tare subtraction is available up to 2.000 lb. for US type, and up to 1.000kg (2.205lb) for the CA/QR/AU type. When tare subtraction is in operation, however, the scalable range for net weight becomes less by the amount of the tare. **(Net weight = Gross weight-Tare)**
2. Preset tare must be a multiple of 2 g for CA/QR/AU type (Kg scale) and a multiple of 0.005 lb for US/CA type (Lb scale).
3. The tare % function is available when the Initial Setting #8-7 is set to 1. The speed key #70 will function as the % key (Refer to page 5-3). Set a tare % within the range from 0.0 to 99.9.
4. When a commodity is placed on the platter and the calculated tare exceeds the maximum, a "TARE WEIGH OVER" error will occur.

14.7 CALLING AND PRINTING GRADE LINES

A grade line is a short message added to a commodity name.
A grade line can be selected from maximum of 49 programmed grade lines and printed on the label.

Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH or FIX, or BY COUNT

Enter the PLU #.

| 3 | 1 |

Press: PLU

Press: G.LINE

Enter the G.LINE #.
(1 to 49)

5

Press: PRT / *

Press: PRT / *

The label is issued.

Remote Display

WEIGHT	UNIT PRICE	TOTAL PRICE
- - - - -	P 4	3.76

Commodity Name

Liquid Crystal Display | DONUTS |

Remote Display

WEIGHT	UNIT PRICE	TOTAL PRICE
		5

Liquid Crystal Display | ENTER THE G.LINE |

Grade Line

Liquid Crystal Display | PREMIUMS OFFERED |

DONUTS

PREMIUMS OFFERED

PACKED ON DEC 28

SELL BY JAN 4

000000 000017

10 PCS   4 / 1.50 $3.76

NET WT. lbs   PRICE lb $ TOTAL PRICE $

TEC STORE
(TEL) 0123-45-6789

(Sample label)

14.8 CALLING AND PRINTING LOGOS

When the initial setting #10-7 is set to "1", a logo containing a picture, a mark, a POP message etc., can be printed on the ingredient label having 12 lines or more for printing ingredient message.
Logo data is created on the PC and stored into the memory through the CMT/PL-3 interface.

Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH, FIX, or BY COUNT

Press: | LOGO |

◇ Select the LOGO type (Normal ←→ F.Shopper).

Enter the logo #. (1 to 26) | 1 | 0 |

| 0 | or | C | Clear the entered logo #.

Press: | PRT/* |

Start the label issue operation.
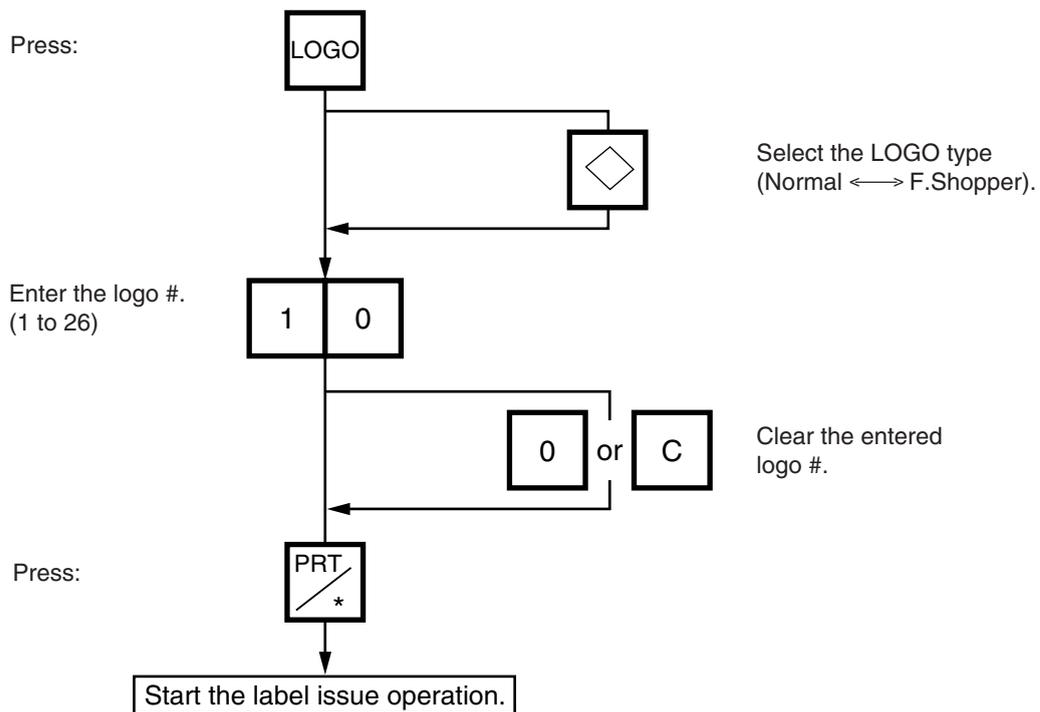
NOTES:
1. The logo # will be effective until it is changed or deleted.
   (Logo # is still _effective_ after turning power off and/or changing mode.)
2. Pressing the | PRT/* | key returns the display to the initial display of Weight mode. This clears the unit price and tare data.
3. LOGOs will not be printed together with a safe handling instruction on a label.
4. LOGOs will be printed in the center of a label.

14.9 SELECTING PRINT ITEM AND ADJUSTING THE LCD BRIGHTNESS

Menu: REG, M.DOWN, or REWRAP
Mode: WEIGH, FIX, or BY COUNT

Press: [PROG.]

[NEXT PLU] or [VOID]

Select an item.
(Refer to Table. 9)

[1] [1 1] [1 9] [2 7] [3 0]

Print ←→ Non print
1: Print
0: Non print

[◇] [◇] [◇]

Darken   Lighten
[NEXT PLU] or [VOID]

[◇]

Press: [PRT / *]
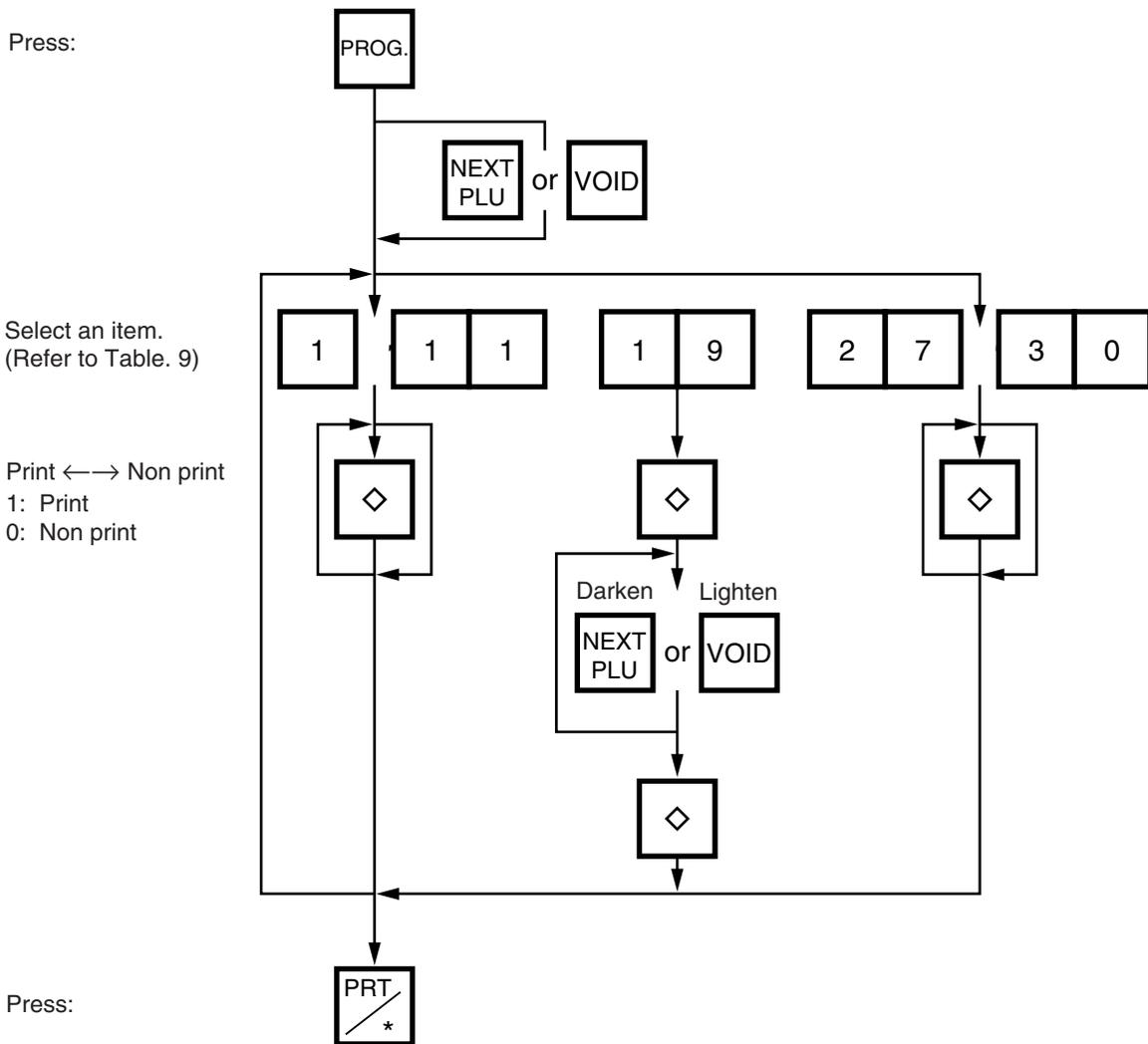
Table 9

Entry	Item		Entry	Item	
1	Packed on date	Print/Non Print	9	Piece count	Print/Non Print
2	Sell by date	Print/Non Print	10	Cooked by date	Print/Non Print
3	Commodity name	Print/Non Print	11	SP/Info./Net Wt.	Print/Non Print
4	Weight	Print/Non Print	19	LCD brightness adjustment	
5	Unit price	Print/Non Print	27	Media selection	Label/Receipt
6	Total price	Print/Non Print	28	Print format	Format No. Selection
7	Barcode	Print/Non Print	29	Mode (2)	Weigh/Fix/By count
8	Ingredient	Print/Non Print	30	Mode (1)	Auto/Manual

NOTES: 1. *A store code can be printed in place of a 'packed on date' and 'sell by date' by changing the initial settings #6-5 and #6-6.*
To print a store code, select 'packed on date' or 'sell by date' as a print item using the above procedure.

2. *Setting data will not be changed by turning the power off, changing the mode or calling a PLU.*

3. *The* $\boxed{0}$ *key has no function.*

4. *Pressing the* $\boxed{C}$ *key allows you to return to the step of selecting the 'packed on date'.*

5. *The range of idle time = 0 to 99 seconds. A setting '0' prohibits display of an auto message.*

6. *Item 29 is operable only when the initial setting #1-5 is set to '0'.*

7. *Be sure to press the* $\boxed{FEED}$ *key after the* $\boxed{PRT/*}$ *key when changing the label format.*

14.10 DATE CHANGE

The date can be changed temporarily.

Menu: REG., M.DOWN, or REWRAP
Mode: WEIGH, FIX, or BY COUNT

Press: DT/TM

Enter the new date.
(Ex. Dec. 18, 1994)

1
2 } Month

1
8 } Day

9
4 } Year

PRT/*

Liquid Crystal Display

| DONUTS | 121894 |
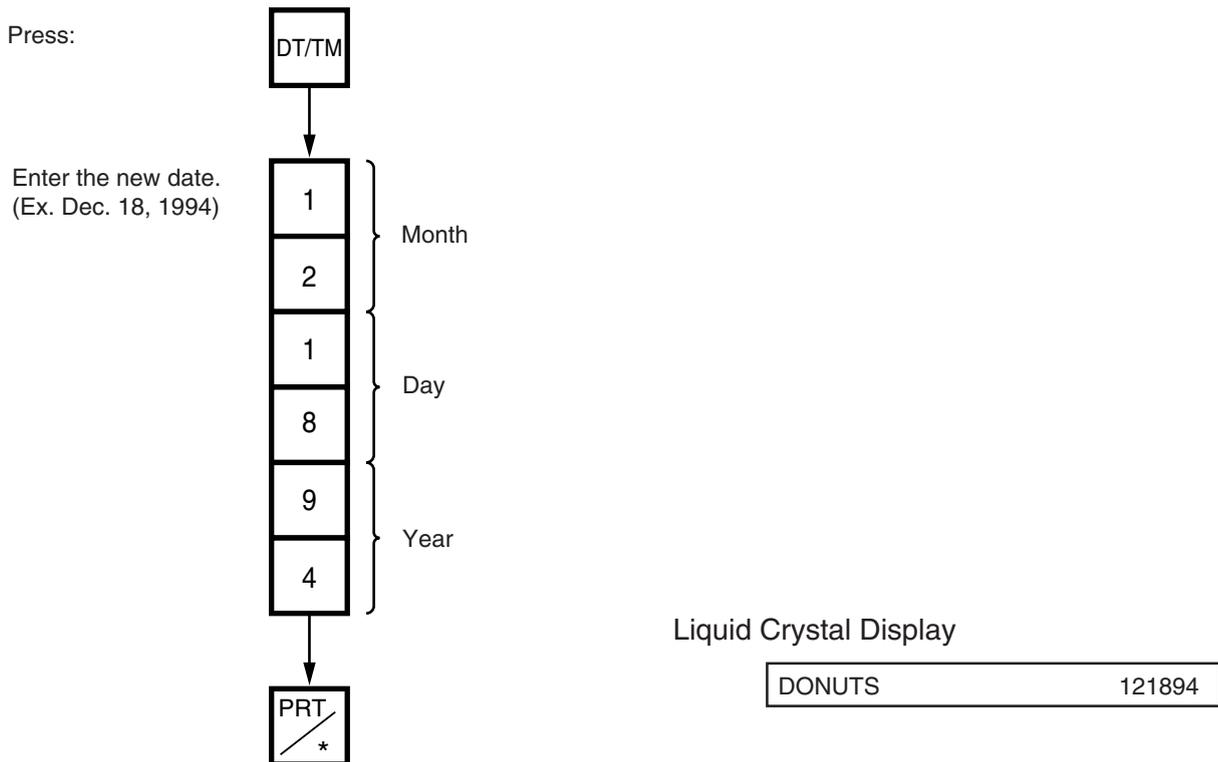
NOTE: *The scale will check the details of the date input. An invalid date will result in an error.*

14.11 BATCH PRINT MODE (with 30 Items Run Assignment)

Menu: REG., M.DOWN, or REWRAP
Mode: FIX, or BY COUNT

Up to 99 label per PLU can be issued in non-scale mode. Up to 30 items can be preset. (However, 0 is preset, issuing will be canceled.)

Enter the PLU #.

Press:

Liquid Crystal Display

#01/000001: C=0

↑   ↑

Item # (1 to 30)   Preset number of labels

Press:

Enter the number of labels to be issued (max. 99)

Register next preset item

Change or cancel the number of labels to be printed (not functions when an item is not registered.)

Next PLU: The next PLU is recalled.
VOID: The previous PLU is recalled.

Change the number of labels to be issued (max.99).

Press:

Press:

(The labels are issued in the order of programmed PLU.)

The label is issued.

● **Changing a Unit Price and Calling G.Line/LOGO**

```
              ▽ x

Enter the quantity.        [ 3 | 0 ]

Call the Grade Line.       [GRADE LINE]

Enter the required Grade   [ 1 | 2 ]
Line# (1 to 49).

Press:                     [PRT /*]

Call PLU designation       [LOGO]
LOGO. (*1)

Enter the required         [ 1 | 0 ]
LOGO# (1 to 26).

Press:                     [PRT /*]

              ▽ y
```
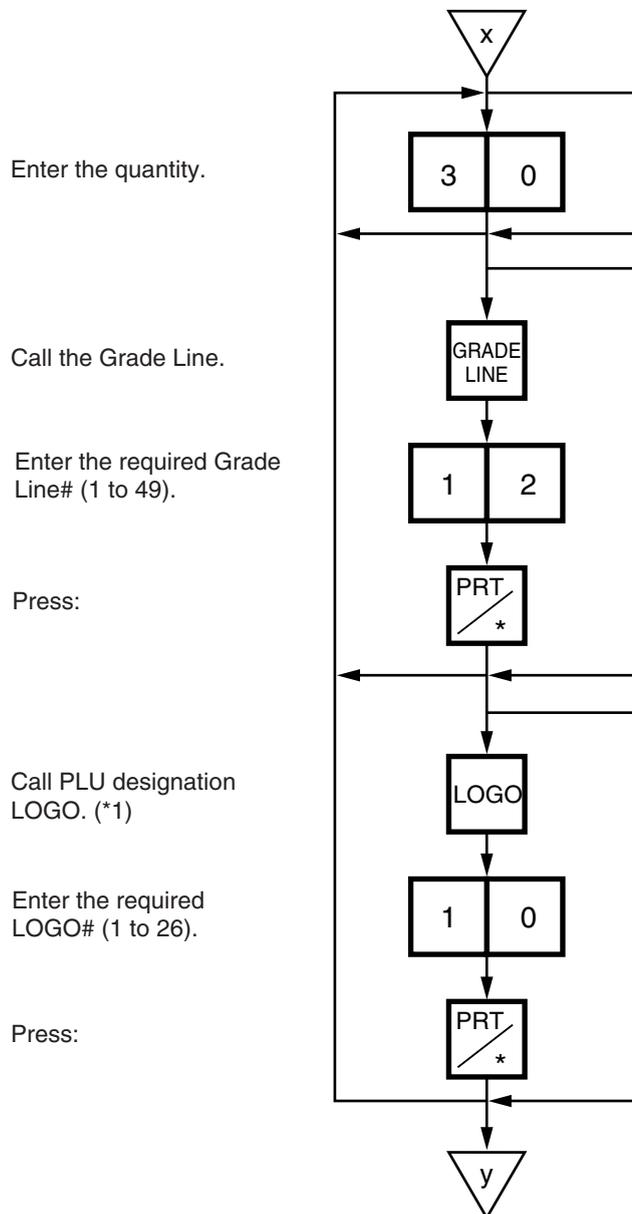
*1   By calling the PLU designation LOGO, the LOGO can be designated per PLU and printed.
     When the PLU does not designate the LOGO, the LOGO programmed before entering Batch
     Print Mode is printed.

● **Stopping or Canceling Label Issue**

```
                            ▽ Z

  Clear an error or stop
  label issuing.              [ C ]


  Cancel output             [ VOID ]


  Press:                    [ PRT / * ]


  Stop issuing the labels and
  cancel PLUs which have            [ C ]
  not been output

                        ▽ A      [ Completed ]
```
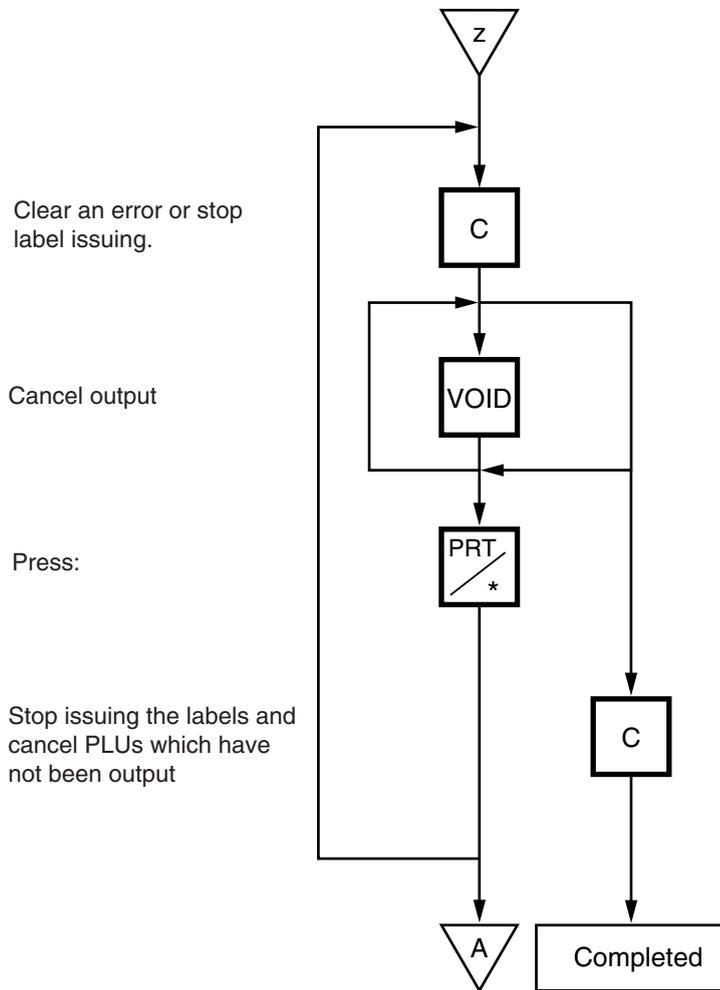
NOTES: 1. When the label for NET. WT statement is not selected, pressing the PRESET COUNT key in FIX mode results in an error.

2. Programmed items are reset when:
   ① the power is off.
   ② changing the menu. (PROG./REG)
   ③ changing the mode. (weigh/by count/fix)
   ④ batch printing has been finished.

3. Pressing the PRESET COUNT key to preset the 31st item results in an error.

4. The LOGO and Grade Line called per PLU cannot be changed.

5. The label issued in Batch Print Mode cannot be corrected using the VOID key.

6. "TOTALS OVERFLOW" error occurs when the PRINT key is pressed to issue each PLU label.

14.12 FLOATING VENDOR

Menu: REG
Mode: WEIGH, FIX, or BY COUNT

Floating vendor function allows you to register different commodities sales together. This function is available when the Initial Setting #11-1 is set to 1 and using a receipt.
Be sure to select IN-LINE in Section 11.14 LON SYSTEM even if no scale is connected, then enter the ID# 1, turn the power off and then on.

Maximum number of registerable commodities

One scale:	200 commodities
One vendor:	99 commodities

Enter the PLU#

┌─────┬─────┐
│ 2 │ 0 │
└─────┴─────┘

Remote Display

WEIGHT	UNIT PRICE	TOTAL PRICE
1.000	1.00	1.00

Press:

┌─────┐
│ PLU │
└─────┘

Liquid Crystal Display | APPLE

Place a commodity on the platter.

Group Vender

Press the speed key the group vendor # is assigned to.

Enter the last digit of the number.

Direct Vendor

Press the speed key the vendor # is assigned to.

Remote Display

WEIGHT	UNIT PRICE	TOTAL PRICE
0.000	P	000000

Liquid Crystal Display | PRESS VENDOR# 1-

NOTE: *Print format varies depending on the settings of the Initial Setting #11-1, 11-2, 11-3, 11-4 and 11-7.*

■ Price deletion

Prices already registered can be deleted in the following procedure.

Enter the deletion mode.

Enter vendor #.

VOID

NEXT PLU: the next item
VOID: the previous item

NEXT PLU or VOID

Delete a registered price.

PRT / *

Exit the deletion mode.

C
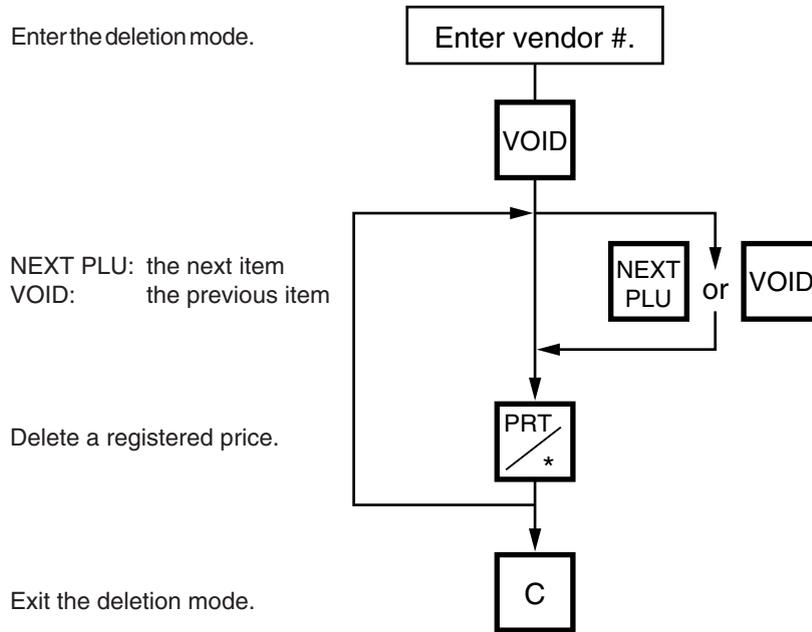
■ Subtotal

The following procedure will sum up all of the registered items.

Enter vendor #.

Press:

ST

Enter prices.

C

Press:
(Cancel)

Press:

PRT / *

A receipt will be issued.
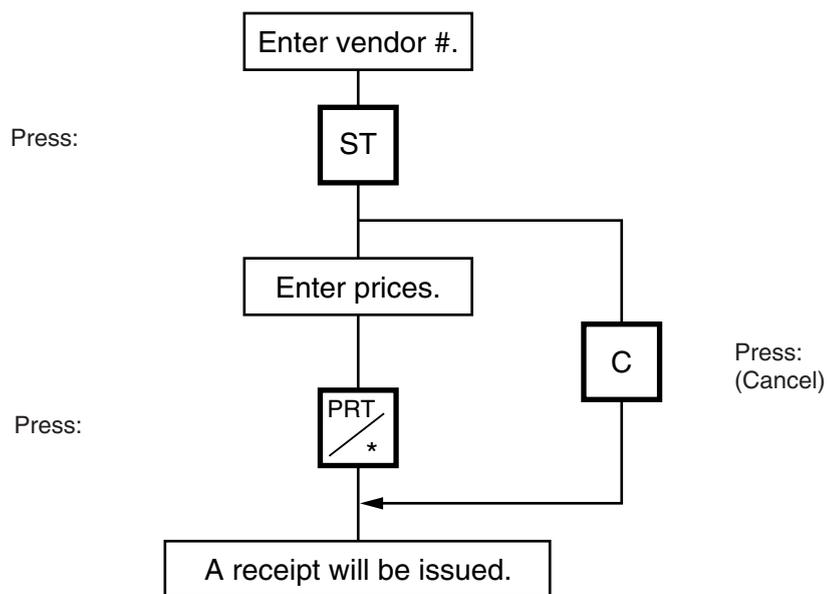
15. TOTAL OPERATION

In Read or Reset mode you can issue a sales report or reset report with either label or journal paper.
Menu: READ or RESET

READ
The totals will not be cleared after they are printed on labels or journal paper.
RESET
The totals will be cleared after they are printed on labels or journal paper.

| ESC. | — | 5 | or | 6 | — | ◇ | — | Issue each Report | — | ESC. |
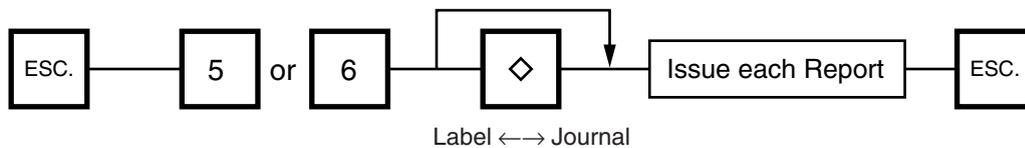
Label ←→ Journal

No.	ITEM	REPORT	RESET	JOURNAL	LABEL
0	HOURLY TOTAL	○	○	○	○
1	GRAND TOTAL	○	○	○	○
2	PLU TOTAL	○	○	○	○
3	VENDOR TOTAL	○	○	○	○

■ How to access the READ or RESET menu

The following main menu is displayed after pressing the ESC. key. Enter '5' to enter the READ menu or '6' to enter the RESET menu. When those menus are protected, enter the menu No. and the password.

Liquid Crystal Display

READ	5

RESET	6

15.1 HOURLY TOTAL REPORT

Ex.)   REPORT Menu

$$\boxed{0} \longrightarrow \boxed{\begin{array}{c}\text{PRT}\\ \diagdown \text{*}\end{array}}$$
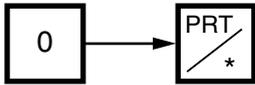
NOTES: 1. When issuing an hourly report, hours with no sales are not printed.
2. An hourly report is printed as follows:
   1) Label: Issued sequentially in on-demand mode.
   2) Journal paper: Issued with journal paper.
   3) Label with backing paper: Issued sequentially in batch mode.
3. If the ⌐C⌐ key is pressed during issuance, the hourly report being printed will complete, then the total report will be issued. If this is done in Reset mode, the print data is cleared to zero.

15.2 GRAND TOTAL REPORT

Total memory

$$\boxed{1} \rightarrow \boxed{\begin{array}{c}\text{PRT}\\ \diagdown \text{*}\end{array}} \rightarrow \boxed{1} \rightarrow \boxed{\begin{array}{c}\text{PRT}\\ \diagdown \text{*}\end{array}}$$
$$\boxed{2}$$
$$\boxed{3}$$

Total memory

$\boxed{1}$: Day total

$\boxed{2}$: Mark Down total

$\boxed{3}$: Rewrap total

15.3 PLU TOTAL REPORT

Total memory   Search Code

$$\boxed{2} \rightarrow \boxed{\begin{array}{c}\text{PRT}\\ \diagdown \text{*}\end{array}} \rightarrow \boxed{1} \rightarrow \boxed{\begin{array}{c}\text{PRT}\\ \diagdown \text{*}\end{array}} \rightarrow \boxed{1} \rightarrow \boxed{\begin{array}{c}\text{PRT}\\ \diagdown \text{*}\end{array}}$$
$$\boxed{2} \qquad\qquad \boxed{2}$$
$$\boxed{3}$$

Individual Total ------ Ⓐ

Block Total ---------- Ⓑ

Zone Total ---------- Ⓒ

Entire PLU Total ----- Ⓓ

Search Code

$\boxed{1}$: PLU#

$\boxed{2}$: UPC#
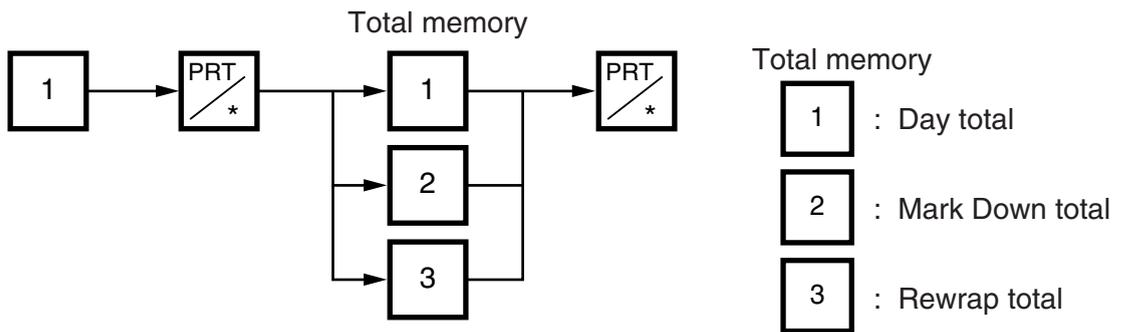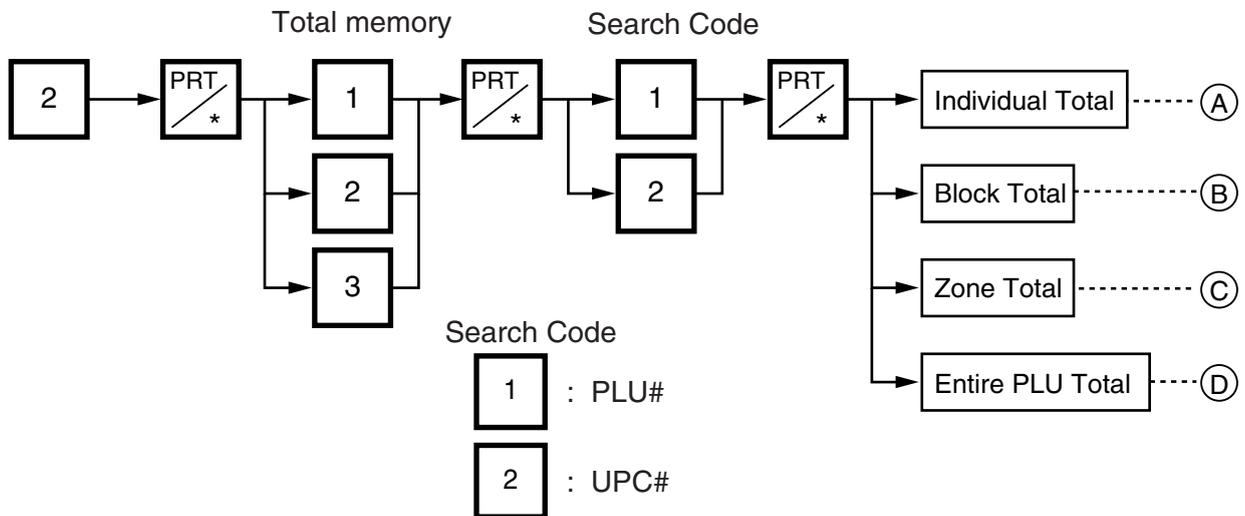
(A) Individual Total
   Ex.) Individual PLU Total (PLU #100)

| 1 | 0 | 0 | ⟶ | PRT / * |
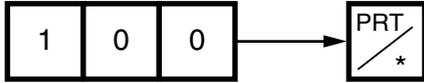
(B) Block Total
   Ex.) UPC Block Total (UPC #100100~100199)

| 1 | 0 | 0 | 1 | ◇ | ◇ | ⟶ | PRT / * |

NOTE: *The* ◇ *key represents 0 through 9. The most significant digit in the starting number is followed by an appropriate number of* ◇ *keys.*

(C) Zone Total
   Ex.) PLU Zone Total (PLU #100~107)

| 1 | 0 | 0 | ⟶ | FOR | ⟶ | 1 | 0 | 7 | ⟶ | PRT / * |

(D) Entire PLU Total

| PRT / * |
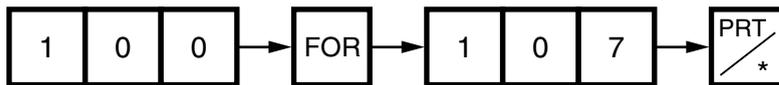
NOTES: 1. When setting the PLU zone, it is not necessary to enter a beginning number which is smaller than an end number.
   2. When issuing a block or a zone total report, a PLU with no sales record is not printed. If all PLUs of the block or zone have no sales record, only the total is printed.
   3. Pressing the C key in the middle of issuing a reset report stops printing and data is not cleared.

15.4 VENDOR TOTAL REPORT

| 3 | ⟶ | PRT / * | ⟶ (All) ⟶ | PRT / * |

(Individual) ⟶ | Enter an individual vndor #. |
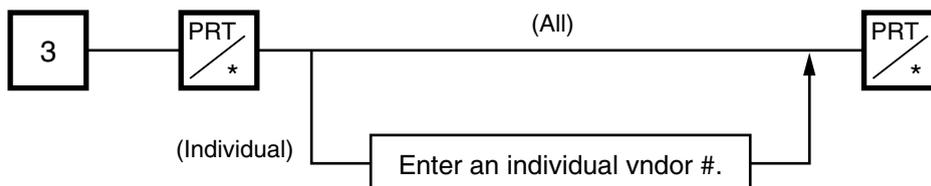
16. ERROR MESSAGE TABLE

Take the following action if an error message has appeared on the commodity name display along with the buzzer sounding.

```
┌─────────────────────────────────────────────────────────────────────────────┐
│                              WARNING!                                          │
├─────────────────────────────────────────────────────────────────────────────┤
│   If you cannot solve the problem with the following solution instruction, do │
│   not attempt further trouble shooting, by yourself.  Turn the power off,      │
│   unplug the printer, then contact TOSHIBA TEC Authorized Service              │
│   representative for assistance.                                               │
│   Do not attempt to repair or adjust alone, because electrical equipment is    │
│   dangerous                                                                    │
└─────────────────────────────────────────────────────────────────────────────┘
```

● **Programming Mode**

Message	Cause	Solution
DATA ENTRY ERROR	Error in key input.	Press the CLEAR key, and re-input the right data.
MEMORY FULL	No memory space to set PLU.	Press the CLEAR key, and delete unnecessary PLUs.
DUPLICATE PLU	The PLU # being changed is already registered.	Press the CLEAR key, and check the PLU.
PLU NOT FOUND	The PLU # being called is not registered.	Press the CLEAR key, and set the data to free PLU#.
CHAR. OVERRUN	Attempt is made to set more than max. allowed number of characters.	Press the CLEAR key, and re-input the right data.
PRT FAILURE	Printer trouble.	1. Check that the label and print head are set correctly. 2. If the label home position is misaligned, press the FEED key.
LABEL OVERRUN	Label overruns.	Press the FEED key.
RESTORE THE PLUS	The capacity of RAM was changed with the ingredient data stored.	Press the CLEAR key and save the ingredient data. Then delete the data from the memory of the unit. After that change the capacity of RAM and load the data to the unit.

● **Label Issue Mode**

Message	Cause	Solution
DATA ENTRY ERROR	Error in key input.	Press the $\boxed{C}$ key, and re-input the right data.
PLU NOT FOUND	The PLU # being called is not registered.	Press the $\boxed{C}$ key, and check the PLU #.
TOTALS OVERFLOW	GRAND TOTAL or PLU TOTAL memory has been exceeded at the time of issuing a label.	Press the $\boxed{C}$ key, then the $\boxed{ESC.}$ key and select 'RESET'. Then sum up the exceeded memory.
MEMORY WILL FULL	The machine judges the memory is full before designated number of media are printed in Batch mode.	Press the $\boxed{C}$ key, then the $\boxed{ESC.}$ key and select 'RESET'. Then sum up the exceeded memory.
PLU DATA ERROR	Error in the PLU data.	Press the $\boxed{C}$ key, and reprogram PLU data.
PRT FAILURE	Printer trouble. Media end.	1. Check that the label and print head are set correctly. 2. If the label home position is misaligned, press the $\boxed{FEED}$ key.
LABEL OVER RUN	Label overruns.	Press the $\boxed{FEED}$ key.

● **Read and Reset Mode**

Message	Cause	Solution
PLU NOT FOUND	Corresponding PLU # is not registered.	Press the $\boxed{C}$ key, and enter the correct PLU #.
PRT FAILURE	Printer trouble.	Same as in the label issue mode.
LABEL OVER RUN	Label overruns.	Press the $\boxed{FEED}$ key.

● CMT Operation Mode

Message	Cause	Solution
MISMATCH SPEC.	Mismatch of the model type.	Press the CLEAR key.
	Mismatch of the base unit.	
	Mismatch of the VERSION.	
	Mismatch of the TRANS-MITTING DATA.	
	Mismatch of the scale capacity.	
BAD TAPE OR CMT	Parity error	Press the CLEAR key.
	Framing error	
	Overrun error	
	Data error	
	Two or More Hardware error	
TIME OUT ERROR	Time out error	Press the CLEAR key.

● LON System Mode

Error message	Cause	Solution	B	BM/S
COMMUNI. ERROR	1. The power of the master or backup master scale is not turned ON. They are not connected with each other or in off-line state. 2. LON cable is broken.	1. Turn the power of the master or backup master scale ON. Connect them with each other or turn the scale in-line. 2. Call your authorized service representative.	◯	◯
SEQUENCE ERROR	The power was not turned OFF and ON again after setting ID #.	Turn the power switch OFF and ON again.	◯	◯
SEQUENCE # ERROR	Text data number is incorrect.	Call your authorized service representative.	—	◯
MASTER BUSY	Registration job is performed on a satellite scale while reset job is performed on the master scale.	1. Quit reset job on the master scale. 2. Quit registration job on the satellite scale.	—	◯
BM NOT RESET	The backup master does not have same PLU with the mater scale.	Down load PLU from the master to the backup master scale. Then run the reset operation again.	◯	—
TEXT ERROR ##	1. Error text is found. 　02: Sequence No. error 　05: LRC error 　08: Text error 　09: Command error 2. The master scale differs from other scale in ROM version.	Call the TOSHIBA TEC authorized service representative.	◯	◯

M: Master scale　　BM: Backup master scale　　S: Satellite scale

17. CLEANING THE PRINT HEAD

WARNING!
Since there is a cutter at the paper outlet, be careful not to injure your fingers when cleaning the print head and cutter.

If the print head is dirty, printing will not be clear. The print head should be cleaned with a print head cleaner everyday before use, according to the following procedure:

1.   Open the label cover and remove the label cassette. (See page 9-1)

2.   Clean the print head element with the print head cleaner.
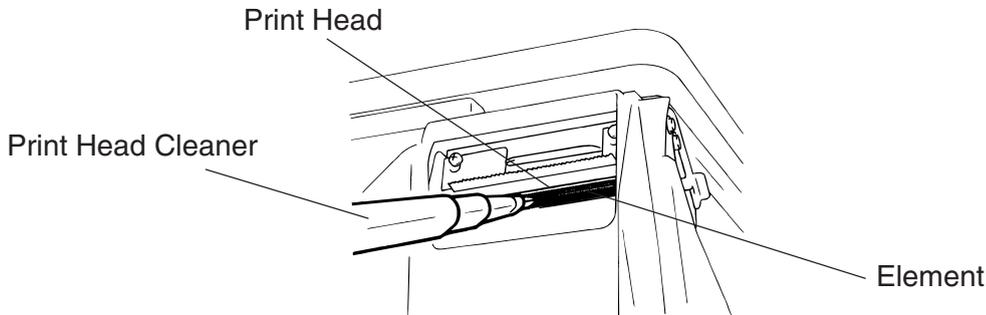
3.   Clean the print head element with the print head cleaner.
   **NOTE:** *Be careful not to damage the print head when cleaning.*
4.   If any label paste is found on the label on the cutter, wipe off paste with alcohol.

■ After removing the label cutter, reattach it using the following procedure.
1.   Install an unloaded label cassette on the scale.
2.   Install the label cutter, aligning the cutter notches with the screw holes.
3.   Secure the cutter with the screw (FL-3x6) so the bottom of the cutter is 0.5~0.8 mm above the peel-off plate.
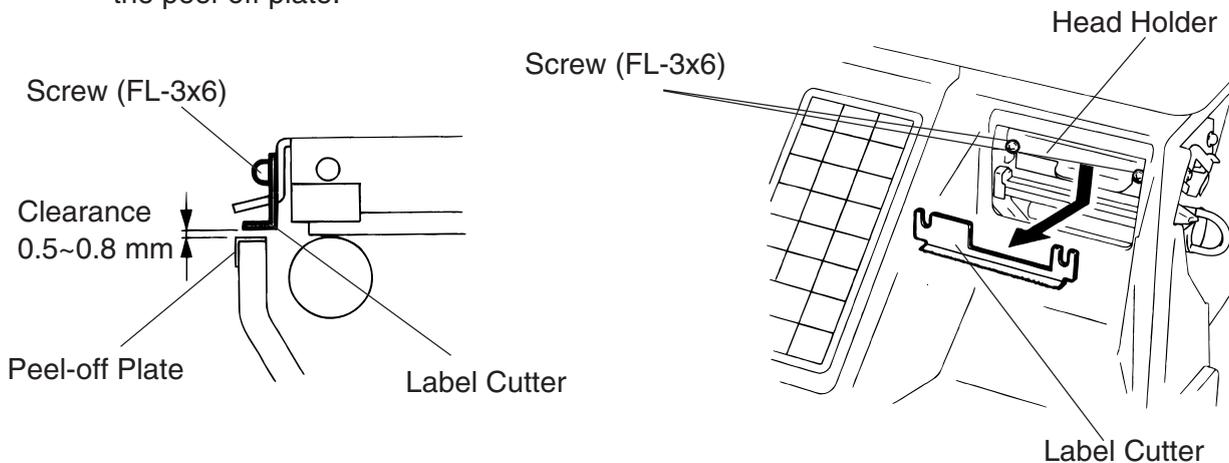
   NOTE: *If the cutter is scratching labels during printing, increase the clearance between the cutter and peel-off plate.*

18. TROUBLESHOOTING

WARNING!
This scale has been manufactured under strict quality control. If you have any trouble, however, DO NOT ATTEMPT TO FIX IT BY YOURSELF. Pull the power plug out of the outlet, and contact the TEC Authorized Service representative.

Problems	Solution
"----" is displayed at power on.	● Was the power turned ON when something was on the platter? → Make sure nothing is on the platter and turn the power on again. ● Is the platter mounted correctly? → Mount the platter correctly and turn the power on again.
Display unstable.	● Is anything touching the platter? → If so, remove it. ● Is the machine in a windy location? → Avoid locations subject to the wind.
No print.	1. Check that the media is loaded correctly. 2. Check whether the print head is set correctly or not.
Dots missing in the print.	Dirty print head. → Clean the print head. Call the TOSHIBA TEC Authorized Service representative if necessary.
Unclear (or blurred) printing.	1. Dirty print head. → Clean the print head. 2. Poor media quality. → Change media type.
Power does not come on.	1. Plug power cord into an AC socket. 2. Check the circuit breakers or fuses. 3. Plug another appliance into the AC socket to check if there is power supplied. Call the TOSHIBA TEC Authorized Service representative if necessary.
You see a raised nap where the media has been cut.	1. Clean the cutter blades. 2. The blades are worn. → Call the TOSHIBA TEC Authorized Service representative.

■ Before You Call for Service

It is our primary concern to give you full satisfaction and better service. If, however, any problem arises in connection with the operation of this scale, please check the following points before calling for service:

    A) Is the power plug fully plugged into an AC outlet?
    B) Is the power turned ON?
    C) Is AC power being properly supplied to the outlet? (Check it using another electric appliance.)
    D) Check the circuit breaker.
    E) Has there been a power failure of any sort?
    F) Has the operation been carried out in the correct order?

TEC

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